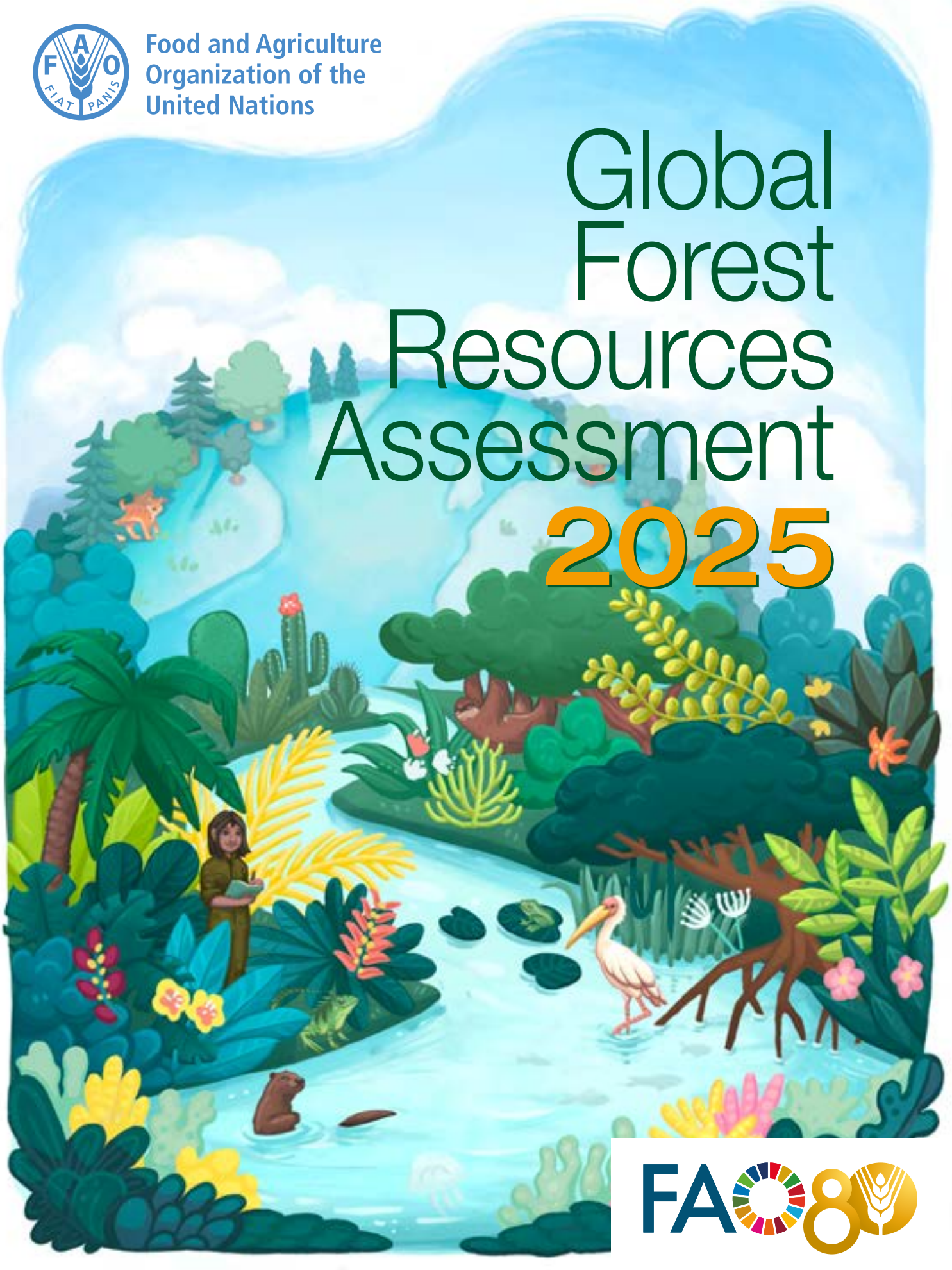
Food and Agriculture Organization of the United Nations

Global Forest Resources Assessment 2025



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Global Forest Resources Assessment 2025

Food and Agriculture Organization of the United Nations
Rome, 2025

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Foreword

Covering about one-third of the Earth's land surface, forests are crucial for food security, livelihoods and for renewable biomaterials and energy. They are habitats for a large proportion of the world's biodiversity, help regulate global carbon and hydrologic cycles, and can reduce the risks and impacts of drought, desertification, soil erosion, landslides and floods. Yet they also face many challenges and demands, and balancing priorities in forest management requires reliable, timely data.

As a knowledge-based organization, the Food and Agriculture Organization of the United Nations (FAO) is mandated to "collect, analyse, interpret and disseminate information relating to nutrition, food and agriculture". In this regard, FAO has been conducting Global Forest Resources Assessments (FRAs) for nearly 80 years – since the early days of the Organization's establishment.

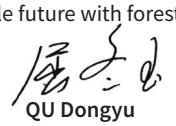
FRAs build on data collected and reported by countries. A truly collaborative approach, combined with consolidated data collection, analysis and validation, ensures that the best and most recent knowledge is shared and applied through a standardized set of definitions and methodology. To reduce the reporting burden on countries, to increase synergies among reporting processes, and to improve data consistency, the process also involves collaboration among many partner organizations.

FRAs – produced every five years – are the most comprehensive and transparent global evaluations of the state, management and uses of forest resources, covering all the thematic elements of sustainable forest management. FRA data serve to inform the global community on the status and trend of forests and to support decisions, policies and investments related to forests and the ecosystem services they provide. FRA data are also key for monitoring progress towards achieving sustainable development and climate targets, as well as the Global Forest Goals and the goals set out in the Kunming–Montreal Global Biodiversity Framework and the United Nations Decade on Ecosystem Restoration.

This 2025 edition of FRA contains the most up-to-date data on the world's forests and how they are changing. For example, it reveals that the world has 4.14 billion hectares (ha) of forest, or 32 percent of total land area. Promisingly, the rate of deforestation is declining, although still high at nearly 10.9 million ha per year in 2015–2025. With the rate of net forest loss of 4.12 million ha per year, we see that much work still needs to be done. The pledges of 91 countries and areas reported to FRA 2025 to restore up to 190 million hectares of degraded forest in the next few decades are a great step in the right direction.

Forests – and their ecosystem services supporting livelihoods, biodiversity, climate regulation, well-being and access to clean air and water – underscore FAO's vision for the Four Betters: better production, better nutrition, a better environment and a better life, leaving no one behind. Yet, the world is not on track to meet important global forest targets, including halting and reversing forest loss and increasing the forest area worldwide.

The wealth of information in this assessment is essential for understanding whether the world is moving in the right direction and what is still needed from the global community. I urge all partners to make good use of this report as we increase our collective work and efforts towards a more sustainable future with forests.



QU Dongyu
FAO Director-General

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Abbreviations

BCEF	biomass conversion and expansion factor
CBD	Convention on Biological Diversity
FAO	Food and Agriculture Organization of the United Nations
FEM	Forest Employment
FRA	Global Forest Resources Assessment
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
ISIC	International Standard Industrial Classification
n.s.	not significant
NWFP	non-wood forest product
OWL	other wooded land
RSS	Remote Sensing Survey
SDG	Sustainable Development Goal
SFM	sustainable forest management
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change
UNSPF	United Nations Strategic Plan for Forests 2017–2030
USD	United States dollar

UNITS OF MEASUREMENT

cm	centimetre
Gt	gigatonne
ha	hectare
km	kilometre
m^3	cubic metre
T	tonne

Key findings

FORESTS COVER MORE THAN 4 BILLION HECTARES, NEARLY HALF OF WHICH IS IN THE TROPICS

The world has a total forest area of 4.14 billion hectares (ha), which is close to one-third (32 percent) of the global land area and equivalent to 0.50 ha of forest per person. The tropical domain has the largest proportion of the world's forests (45 percent), followed by the boreal, temperate and subtropical domains.[1]

Of the regions, Europe has the largest forest area, accounting for 25 percent of the world's total. South America has the highest proportion of forest, at 49 percent of the total land area.

More than half (54 percent) of the world's forests is in only five countries – the Russian Federation, Brazil, Canada, the United States of America and China (in descending order by area).

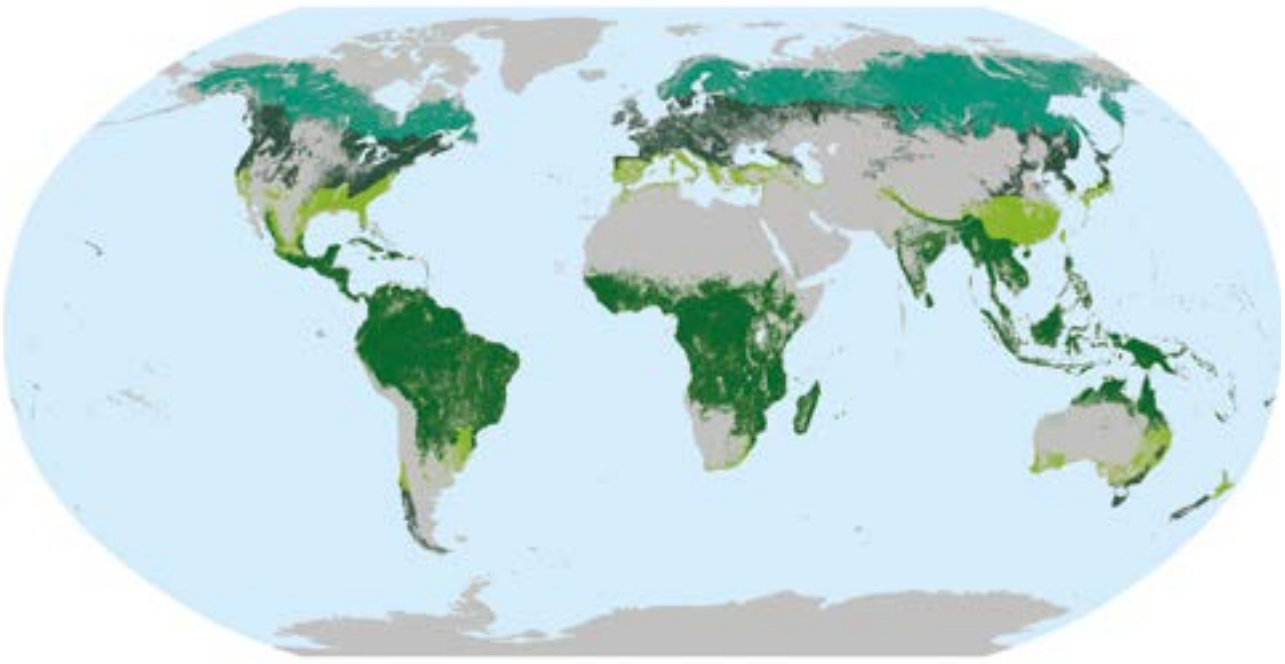
THE NET LOSS OF FOREST AREA HAS BEEN REDUCED BY MORE THAN HALF SINCE THE 1990S

The annual rate of net forest loss[2] fell from 10.7 million ha in 1990–2000 to 4.12 million ha in 2015–2025. This was the result of reduced deforestation in some countries and the expansion of forest area in some others.

[1] Numbers shown in figures in these key findings may not sum to the totals indicated and percentages may not tally to 100 due to rounding. Not all countries and areas reported on all parameters mentioned herein.

[2] Forest area net change is calculated as the difference between the area that is deforested in a given period and the area of forest expansion. When deforestation is greater than forest expansion, there is a net forest loss.

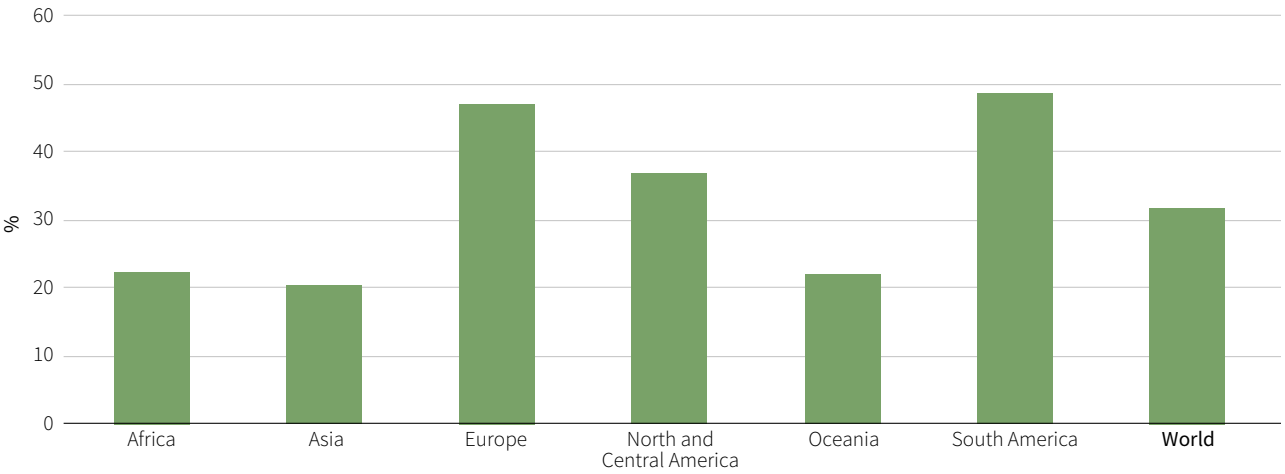
Global distribution of forests, by climatic domain, 2025



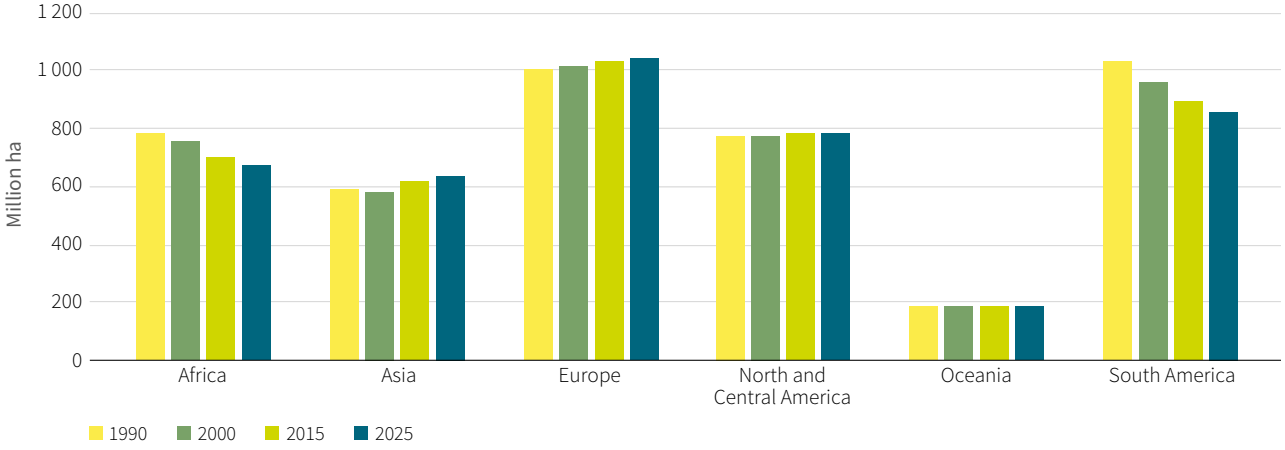
Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. The percentages in the legend indicate the proportion of total forest area in each climatic domain.

Sources: Bourgoin, C., Ameztoy, I., Verhegghen, A., Desclée, B., Carboni, S., Bastin, J., Beuchle, R., *et al.* 2024. *Mapping global forest cover of the year 2020 to support the EU regulation on deforestation-free supply chains*. JRC136960. Luxembourg, Publications Office of the European Union and the Joint Research Centre of the European Commission. https://data.europa.eu/doi/10.2760/262532. FAO. 2012. *Global ecological zones for FAO forest reporting: 2010 update.* Rome. https://openknowledge.fao.org/handle/20.500.14283/ap861e

Forest area as a percentage of land area, by region, 2025



Forest area, by region, 1990–2025



Forest area increased in Asia between 1990 and 2025, albeit at a lower rate in the most recent decade. Forest area also increased over the 35-year period in Europe and to a lesser extent in North and Central America.

Forest area has declined substantially in Africa and South America since 1990, although the rate of loss slowed in both regions in the decade to 2025.

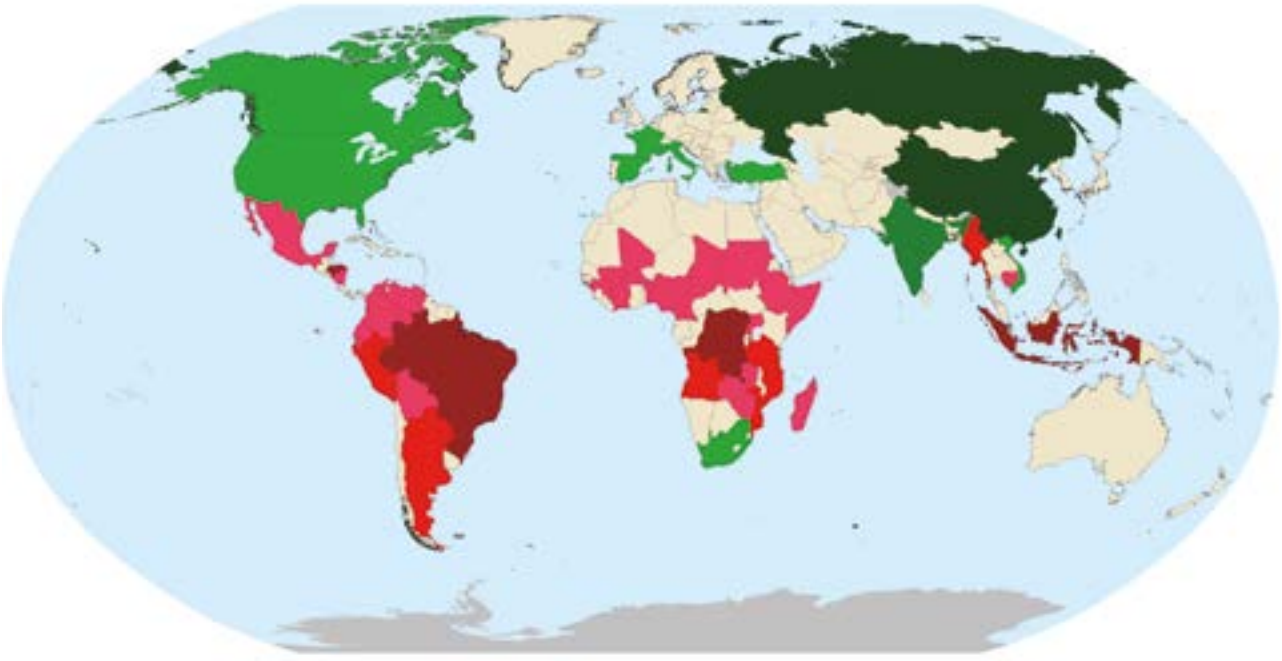
DEFORESTATION CONTINUES TO DECLINE

An estimated 489 million ha of forest has been lost worldwide through deforestation since 1990, but the rate of loss has slowed. The deforestation rate was estimated at 10.9 million ha per year in 2015–2025, down from 13.6 million ha per year in 2000–2015 and 17.6 million ha per year in 1990–2000. The rate of forest expansion slowed from 9.88 million ha per year in 2000–2015 to 6.78 million ha per year in the decade to 2025.

MORE THAN 90 PERCENT OF THE WORLD'S FORESTS ARE REGENERATING NATURALLY

Naturally regenerating forests cover 3.83 billion ha, which is 92 percent of the world's total forest area. The area of this forest category decreased by 324 million ha between 1990 and 2025, but the rate of net loss slowed from 13.8 million ha per year in 1990–2000 to 6.97 million ha in 2015–2025.

Annual forest area net change, by country, 1990–2025

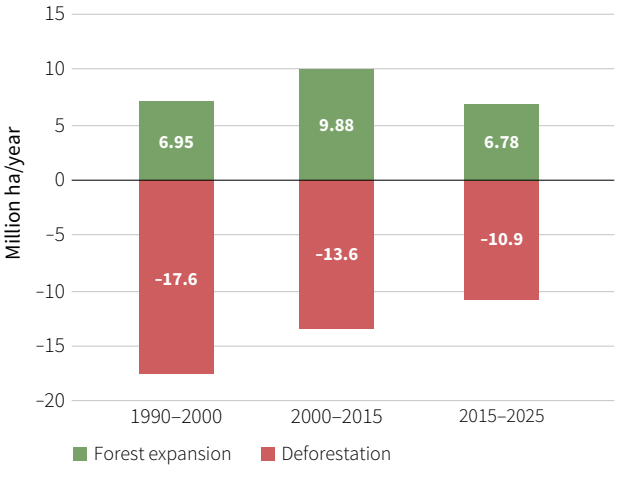


1 000 ha/year

Net gain: >501 251–500 51–250 Small changes: >±50 Net loss: >−501 251–500 51–250 No data

Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

Global annual rate of forest expansion and deforestation, 1990–2025



Note: The sum of figures for forest expansion and deforestation presented here might not equal estimates of net forest area change given elsewhere in the report because the former include FAO estimates and net forest area change is derived entirely from complete time series of forest-area data, as provided in the reports for countries and areas.

Global annual net change of naturally regenerating forest, 1990–2025

PRIMARY FORESTS OCCUPY NEARLY ONE-THIRD OF THE WORLD'S FOREST AREA

Primary forests[3] cover at least 1.18 billion ha (29 percent of the total forest area). Of the regions, Europe has the largest area of primary forest, at 311 million ha, followed by South America (299 million ha) and North and Central America (280 million ha). The area of primary forest worldwide decreased by 110 million ha between 1990 and 2025. Primary forests were lost at a rate of 1.61 million ha per year between 2015 and 2025, which was less than half the rate in 2000–2015, when it was 3.92 million ha per year.

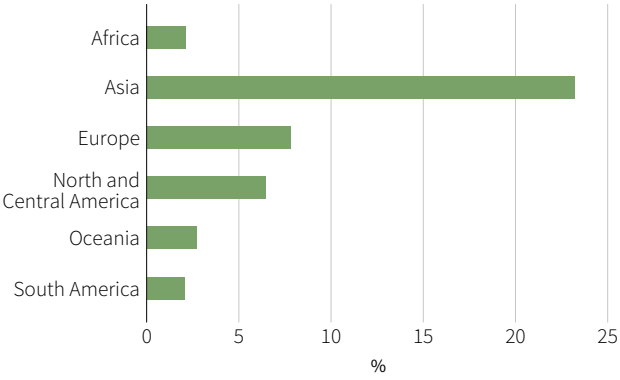
THE RATE OF INCREASE IN PLANTED-FOREST AREA HAS SLOWED

Planted forests account for 8 percent of the total forest area, covering an estimated 312 million ha in 2025. The largest area of planted forests is in Asia, at 146 million ha, where this forest type represents 23 percent of the total forest area (the largest proportion of any region). The area of planted forests has increased in all regions (by a total of 120 million ha) since 1990, but, globally, the rate of increase slowed in the last ten years.

Intensively managed plantation forests account for about half the total planted-forest area worldwide. The largest share of this category of planted forests is in South America, where it constitutes nearly 100 percent of all planted forests. Almost all plantation forests (95 percent) in South America are composed of introduced species. Europe has the lowest share of plantation forest, at about 6 percent of the total area of planted forests.

[3] Primary forests are naturally regenerating forests composed of native species where there are no visible indications of human activities and the ecological processes have not been significantly disturbed.

Planted forest as a percentage of total forest area, by region, 2025

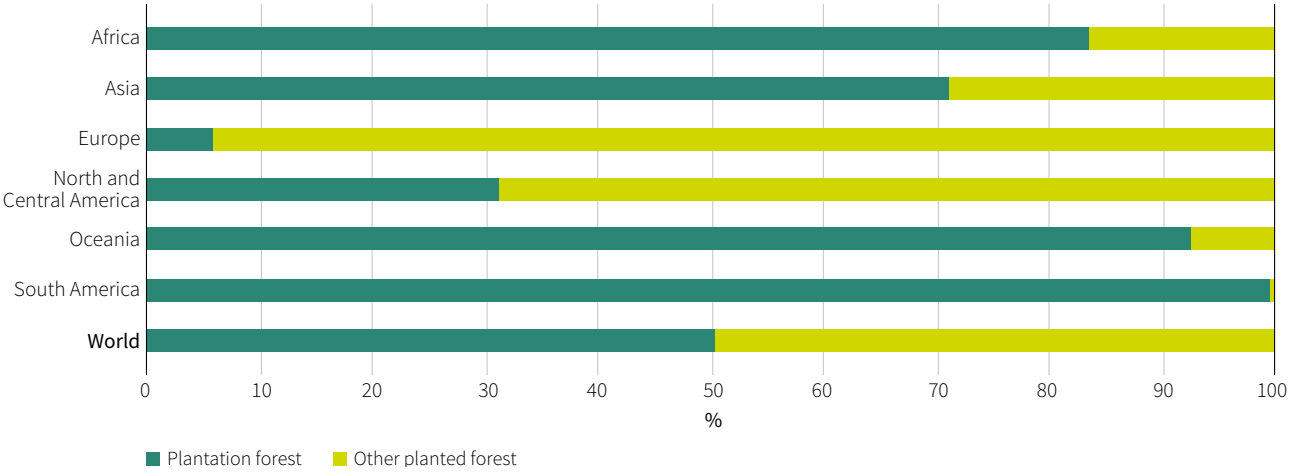


THE WORLD'S FOREST GROWING STOCK, BIOMASS AND CARBON HAVE INCREASED

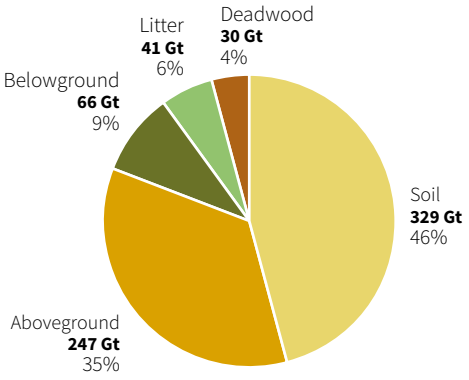
The world's forest growing stock in 2025 is estimated at 630 billion m^3, which is an average of 152 m^3 per ha. Approximately one-third of the growing stock is in primary forests.

Following declines in the 1990s, the world's forest growing stock, biomass and carbon all increased after 2000, with the growth rate accelerating over time. Major differences exist between climatic domains, however, with significant gains in these three parameters over the period in boreal and temperate forests and sharp declines in tropical forests.

Plantation forest and other planted forest as a proportion of planted-forest area, by region and globally, 2025



Total forest carbon stock, by carbon pool, 2025



Note: The first value against each carbon pool refers to total forest carbon stock.

Global forest biomass in 2025 is estimated at 709 gigatonnes, which is an average of 171 tonnes per ha. The forest carbon stock, including all carbon pools, is estimated at 714 gigatonnes, or 172 tonnes per ha. Forty-six percent of the forest carbon stock is in soil, 44 percent is in living (aboveground and belowground) biomass and 10 percent is in litter and deadwood.

ONE-FIFTH OF THE WORLD'S FORESTS IS IN LEGALLY ESTABLISHED PROTECTED AREAS

The area of forest in legally established protected areas worldwide is estimated at 813 million ha, which is about 20 percent of the total forest area. Of the six regions, Asia has the largest share of forests in protected areas, at 26 percent. The area of forest in protected areas has increased by 251 million ha globally since 1990.

MORE THAN HALF OF ALL FORESTS HAVE MANAGEMENT PLANS

The area of forest under management plans has increased in all regions since 1990; globally, it has grown by 365 million ha, reaching 2.13 billion ha (55 percent of the total forest area) in 2025. Of the six regions, Europe has the highest percentage of forests under management plans, at 94 percent.

FIRE IS A PREVALENT FOREST DISTURBANCE IN THE SUBTROPICS, AND INSECTS, DISEASES AND SEVERE WEATHER CONTINUE TO AFFECT MAINLY THE TEMPERATE AND BOREAL DOMAINS

Forests face many disturbances that can adversely affect their health and vitality and reduce their capacity to provide goods and ecosystem services. Fire is a significant disturbance in forests and a contributor to forest loss and degradation. On average, 261 million ha of land was affected by fire annually in 2007–2019; almost half (49 percent) of this area was forested. About 123 million ha of forest was affected by fire in 2019, of which 79 percent was in the subtropical climatic domain, 8 percent was in the boreal domain, 8 percent was in the tropical domain and 6 percent was in the temperate domain.

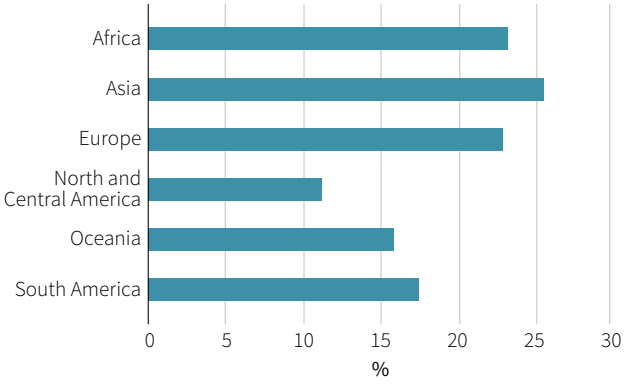
Insects, diseases and severe weather events damaged about 41 million ha of forests in 2020, mainly in the temperate and boreal domains.

THE WORLD'S FORESTS ARE MOSTLY PUBLICLY OWNED

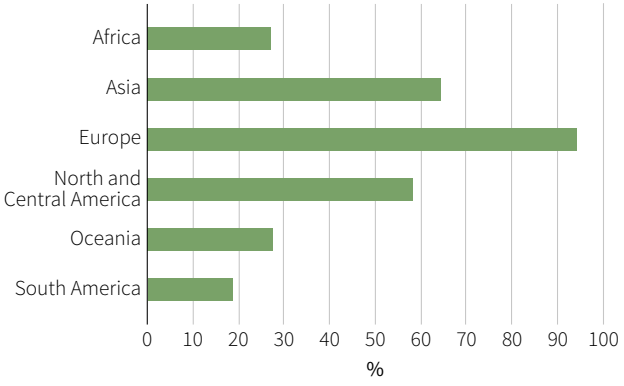
Seventy-one percent of the world's forests is under public ownership,[4] 24 percent is privately owned, and

[4] As of 2020, the most recent year for which global data are available.

Proportion of forest in legally established protected areas, by region, 2025



Proportion of forest area with long-term management plans, by region, 2025



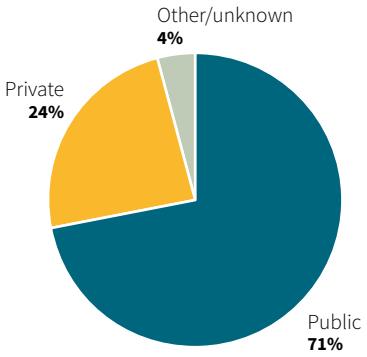
the ownership of the remainder is categorized as either "unknown" or "other".

Public ownership is predominant in all regions. Oceania, North and Central America, and South America have the highest proportions of private forest, at more than one–third of the total forest area in each region.

Management by public administrations is predominant in all regions except Oceania (where "private" predominates); it is highest in Africa (91 percent), South America (89 percent) and Asia (85 percent).

Globally, the share of management rights held by public administrations decreased between 1990 and 2020, from 94 percent to 81 percent; conversely, the share of publicly owned forests managed by business entities and institutions increased from 4 percent to 15 percent. The share of publicly owned forests managed by Indigenous Peoples and local communities increased from 2 percent to 3 percent between 1990 and 2020.

Proportion of total forest area, by three ownership categories, 2020



Notes: "Other" applies mainly to forest areas with mixed or disputed/undeclared ownership or with ownership in transition. Percentages might not tally to 100 due to rounding.

PRODUCTION IS A MAIN MANAGEMENT OBJECTIVE OF THE WORLD'S FORESTS

Globally, 1.20 billion ha of forest (29 percent of the total forest area) is managed primarily to produce wood and non-wood forest products. In addition, about 616 million ha of forest is designated for multiple use, which often includes production. The largest forest area designated for production is in Europe, at 548 million ha, which is more than half the region's total forest area and almost half the total forest area designated for production globally.

The area of forest designated primarily for production and multiple use worldwide decreased by 29.8 million ha and 97.5 million ha, respectively, between 1990 and 2025.

NEARLY 12 PERCENT OF THE WORLD'S FORESTS IS ALLOCATED FOR BIODIVERSITY CONSERVATION

Globally, 482 million ha of forest is designated primarily for biodiversity conservation, an increase of 118 million ha compared with 1990.

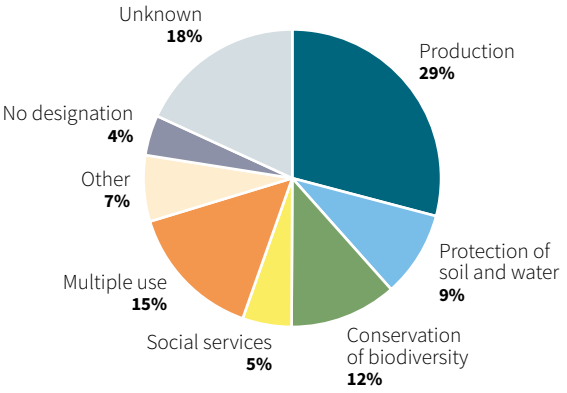
Of the regions, Africa has the largest area of forest designated for biodiversity conservation, at 130 million ha, equivalent to 20 percent of the region's forest area. This is also the highest proportion among the regions.

ABOUT 9 PERCENT OF THE WORLD'S FORESTS IS DESIGNATED PRIMARILY FOR SOIL AND WATER PROTECTION

Globally, 386 million ha of forest is designated primarily for the protection of soil and water, an increase of 123 million ha since 1990. The rate of increase in the forest area allocated for this purpose has grown over time and

Proportion of publicly owned forest area, by holder of management rights and region, 2020

Proportion of total forest area designated for various primary management objectives, 2025



Note: Percentages might not tally to 100 due to rounding.

especially in the most recent decade. Of the regions, Europe has the largest area of forest designated for the protection of soil and water, at 173 million ha, which is 17 percent of the region's total forest area. The largest proportion of forest designated for the protection of soil and water is in Asia, at 20 percent.

MORE THAN 5 PERCENT OF THE WORLD'S FOREST IS USED MAINLY FOR SOCIAL SERVICES

An estimated 221 million ha of forests globally is allocated for social services such as recreation, tourism, education, research and the conservation of cultural and spiritual sites. This is an increase of 79.2 million ha since 1990, with the highest rate of increase occurring in 2015–2025. Of the regions, South America has the largest area of forest designated for social services, at 154 million ha.

1 Introduction

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For nearly 80 years, the Food and Agriculture Organization of the United Nations (FAO) has, at the request of its Members, collected, analysed and disseminated information on the world's forest resources through the Global Forest Resources Assessment (FRA).

Since 2005, the FRA has relied on data provided by a network of officially nominated national correspondents that is well-established today and covers 197 countries and areas. FRA reports are now produced every five years to provide up-to-date information on the world's forests and how they are changing.

The scope and processes of FRAs reflect recent developments in international forest policy, such as the 2030 Agenda for Sustainable Development, the United Nations Strategic Plan for Forests 2017–2030 (UNSPF), the Paris Agreement on climate change, and the recently adopted Kunming–Montreal Global Biodiversity Framework. For example, efforts were made to exchange information with the national focal points for the United Nations Framework Convention on Climate Change (UNFCCC) and for Sustainable Development Goal (SDG) 15 (Box 1) and to enhance collaboration with the United Nations Forum on Forests on reporting on the Global Forest Goals, as set out in the UNSPF.

Efforts were also made to streamline reporting for FRA 2025 with the aim of reducing the reporting burden on countries, minimizing duplication, making reporting more relevant, and, to the extent possible, increasing the quality, consistency and transparency of the reported data. If new data become available inside the five-year FRA reporting cycle, countries may now also provide voluntary updates of their reports (FAO, 2023a).

The online reporting platform implemented for FRA 2020 has been further developed to facilitate reporting and to increase the transparency and reliability of estimates and the accessibility and usability of data for end-users (Box 2). For the first time, FRA data are available via an application programming interface to allow automated data downloads and enhance collaboration and integration with other organizations and users.

Process

Each FRA is independent of previous FRAs. When new and improved data become available, countries and areas may revise previously reported data to reflect the more accurate estimates; hence, data reported for different FRAs should not be compared.

The preparatory work for FRA 2025 began in 2021 with an internal evaluation of the FRA 2020 reporting process, followed by a user survey, the results of which assisted in shaping the scope and reporting content of FRA 2025. The scope and content were further refined in consultation with other teams in the FAO Forestry Division as well as with the FRA Advisory Group, partners of the Collaborative Forest Resources Questionnaire, and the FAO–United Nations Economic Commission for Europe Team of Specialists on Sustainable Forest Management. The Expert Consultation held in September 2022 provided important inputs for the finalization of the scope and reporting framework of FRA 2025 (Henderson Howat *et al.*, 2022).

The reporting process was launched in February 2023 at the first workshop (for Caribbean countries, held in Bridgetown, Barbados) for national FRA correspondents. Thirteen more workshops were convened between March and December 2023 to support countries in compiling and finalizing the FRA 2025 country reports (Annex 1). The workshops also provided a forum in which national correspondents could share their experiences with colleagues from other countries.

Throughout the reporting phase, regional FRA focal points and reviewers were in regular contact with national correspondents and their teams to provide technical support on the reporting tables, the analysis and interpretation of national data, and the use of the online reporting platform. Once compiled, the country reports were submitted for technical review via the online platform. With the technical review, country reports underwent detailed checks to ensure completeness and the correct application of definitions and methodologies as well as internal consistency. Where needed, consistency was also

Box 1. Global Forest Resources Assessment reporting and the Sustainable Development Goals

The 193 Member States of the United Nations adopted the 17 Sustainable Development Goals (SDGs) in September 2015 as part of the 2030 Agenda for Sustainable Development. These global goals are designed to steer the actions of the international community between 2016 and 2030. A comprehensive global indicator framework, consisting of 232 indicators, was established in March 2017 to monitor progress. Forests are crucial for achieving many of the SDGs, particularly SDG 15 (life on land), which highlights their importance for the sustainability of terrestrial ecosystems. FAO serves as the custodian agency for 21 indicators and contributes to another five. Three of these indicators are for SDG 15, with data on two (15.1.1 and 15.2.1) collected and reported through the Global Forest Resources Assessment (FRA) (see Figure A).

SDG indicator 15.1.1, "Forest area as a proportion of total land area", is calculated by dividing the forest area reported by countries and areas in FRAs by their official land areas. Land-area data are collected from FAO Members through the annual FAO Questionnaire on Land Use, Irrigation and Agricultural Practices and are published in FAOSTAT.

SDG indicator 15.2.1, "Progress towards sustainable forest management", is more complex to measure because no single quantifiable characteristic fully captures the multiple dimensions of sustainable forest management. FAO collaborated with partners to develop a reporting methodology, establishing five subindicators to monitor progress across the economic, social and environmental aspects of sustainable forest management (Figure B).

The environmental values of forests are assessed via three subindicators that measure change in forest area ("annual forest area change rate"), biomass stock in forests ("aboveground biomass in forest"), and efforts to protect biodiversity and other natural and cultural resources ("proportion of forest area within legally established protected areas"). The other two subindicators focus on the economic and social dimensions of sustainable forest management. The presence of forest management plans (as measured by the subindicator, "proportion of forest area with long-term forest management plans") reflects a commitment to sustainability, and the area of certified forest ("forest area under independently verified forest management certification schemes") indicates compliance with national or international management standards, verified by independent certification bodies.

Data for subindicators 1–4 are collected through the FRA country reporting process, and data for subindicator 5 are obtained from two global certification bodies, the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification.

A dashboard with "traffic lights" is used to assess progress on each subindicator at the regional and global levels, indicating whether the conditions are improving (green), stable (amber) or deteriorating (red).

Detailed definitions and methodologies for each indicator and subindicator can be found in the SDG metadata repository.*

Annually since 2017, FAO has reported data to the United Nations Statistics Division for SDG indicators 15.1.1 and 15.2.1 at the global, regional and country levels. Among the subindicators, data on forest certification are updated annually; for the other indicators and subindicators, reports up to 2019 were based on data from FRA 2015, while reports for 2020–2025 relied on FRA 2020 data. From 2026, reports will be based on FRA 2025 data, with voluntary updates by countries as new information becomes available.

Annual reports and data on these indicators can be accessed through the FAO SDG Indicators Data Portal (FAO, n.d.).

In addition to compiling SDG indicators 15.1.1 and 15.2.1, the FRA team coordinates the compilation of indicator 15.4.2, which is designed to monitor progress on the conservation of mountain ecosystems (SDG target 15.4). This indicator is composed of two subindicators – 15.4.2a, "Mountain Green

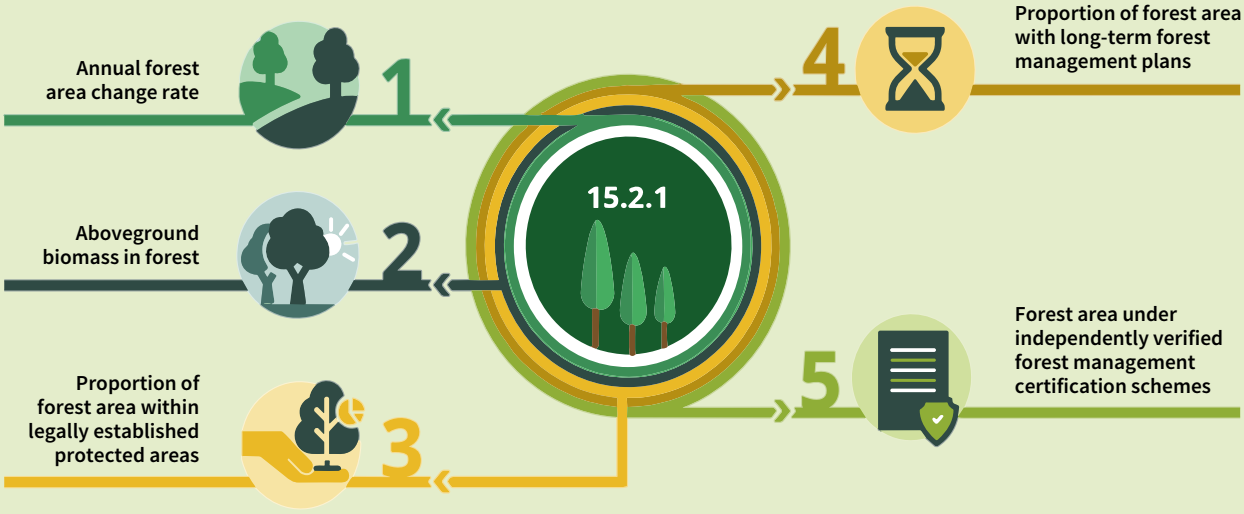
(Continued)

FIGURE A. Sustainable Development Goal 15 and relevant forest-related targets and indicators reported through the Global Forest Resources Assessment

Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	**Indicator 15.1.1** Forest area as a proportion of total land area
Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	**Indicator 15.2.1** Progress towards sustainable forest management

Box 1. *(Continued)*

FIGURE B. Subindicators for Sustainable Development Goal 15.2.1: Progress towards sustainable forest management



Cover Index", for measuring the extent of, and changes in, green cover in mountain areas; and subindicator 15.4.2b, "proportion of degraded mountain land", designed to monitor the extent of degraded mountain land as a result of land-cover change. This indicator is monitored using spatially explicit land-cover data following technical guidance and with the support of easy-to-use computation tools and eLearning courses developed by FAO and partners to support countries in reporting on this indicator.

Note: * The SDG indicators metadata repository is accessible at https://unstats.un.org/sdgs/metadata/.

checked against other published information sources. Around 30 experts from FAO and other international bodies contributed to the review process. A final validation phase was conducted to officially inform national heads of forestry of the contents of the report and to request their clearance for publication on a no-objection basis.

Table 1 summarizes the key milestones in the development of FRA 2025.

Scope

FRA 2025 examines the status of, and trends in, around 50 broad variables (under seven main topics – see below) in the period 1990–2025. The backbone of the assessment are data reported through standardized country reports, which were compiled by officially nominated national correspondents through the online platform, as described above.

Each report contains 22 reporting tables organized by the following seven topics: (1) forest extent, characteristics and changes; (2) growing stock, biomass and carbon; (3) forest designation and management; (4) forest ownership and management rights; (5) forest disturbances; (6) policies and legislation; and (7) non-wood forest products. For each reporting table, national correspondents were requested to provide full references for original data, describe the methodologies used for estimation, forecasting and reclassification, and document the assumptions made.

FRA 2025 includes a total of 236 countries and areas, based on the United Nations Statistics Division Standard country or area codes for statistical use (M49) (United Nations Statistics Division, n.d.). The following listed units are excluded:

- Åland Islands (included under Finland)
- Antarctica
- Bouvet island
- British Indian Ocean Territory
- China, Hong Kong SAR (included under China)
- China, Macao SAR (included under China)

Box 2. The Global Forest Resources Assessment Online Platform

The Global Forest Resources Assessment (FRA) Online Platform was implemented for FRA 2020* in response to an identified need for an online tool capable of facilitating reporting, review and transparency and improving the dissemination of results. Building on the success of reporting for FRA 2020, the online platform was further enhanced for FRA 2025. All data and metadata reported for FRA 2020 were pre-filled, and several functionalities – such as automated checks, the document repository and geospatial tools – were improved. Countries were enabled and encouraged to add hyperlinks to data sources and references.

The FRA Online Platform serves as a common reporting tool for other partners of the Collaborative Forest Resources Questionnaire,† especially for collecting data for pan-European reporting on indicators for sustainable forest management, in collaboration with Forest Europe and the United Nations Economic Commission for Europe. The platform also helps in monitoring progress towards Sustainable Development Goal 15 and other internationally agreed goals and targets. Access to the platform for data entry is exclusive to FRA national correspondents and their collaborators.

The FRA Online Platform is available in the six United Nations languages (Arabic, Chinese, English, French, Russian and Spanish). Its open-access dissemination module has the following functionalities: visualization of all data reported by individual countries; download capability for all individual reporting tables in CSV format; download capability for regional and subregional summary statistics in a non-proprietary spreadsheet format; and the capability for bulk downloads of all data. The platform had 17 000 users and 372 700 pageviews in 2024.

Notes: * FAO. 2020. *Global Forest Resources Assessment 2020: Main report*. Rome, FAO. † FAO, the International Tropical Timber Organization, Forest Europe, the United Nations Economic Commission for Europe, the Observatory of Central African Forests, and the countries of the Montréal Process.

TABLE 1. Key milestones of the Global Forest Resources Assessment 2025

Milestone/activity	Date	Comment
Establishment of the Global Forest Resources Assessment (FRA) 2025 National Correspondents' Network	October 2022	Official letters sent to national heads of forestry to confirm or update details of national correspondents
Finalization of FRA 2025 scope and FRA Platform improvements	December 2022	Reporting content and platform preparations finalized for the reporting process, including prefilling with FRA 2020 data
Regional and subregional workshops	February–December 2023	National correspondents received technical assistance for the compilation of their FRA 2025 country reports. Country reports reviewed
Close of the reporting process	January–September 2024	FRA 2025 country reports submitted to FRA for final review and validation by national authorities
Data analysis and report drafting	October 2024–December 2024	Data cleaning, data analysis, production of key findings and drafting of main report
Preparation of FRA 2025 publications	January 2025–October 2025	Report editing, design, layout, translations into six official United Nations languages, proofreading and preparation of other outreach products
Launch of FRA 2025 results	October 2025	Release of FRA 2025 results and publications

- Christmas Island
- Cocos (Keeling) Islands
- French Southern Territories
- Heard Island and McDonald Islands
- South Georgia and the South Sandwich Islands
- United States Minor Outlying Islands.

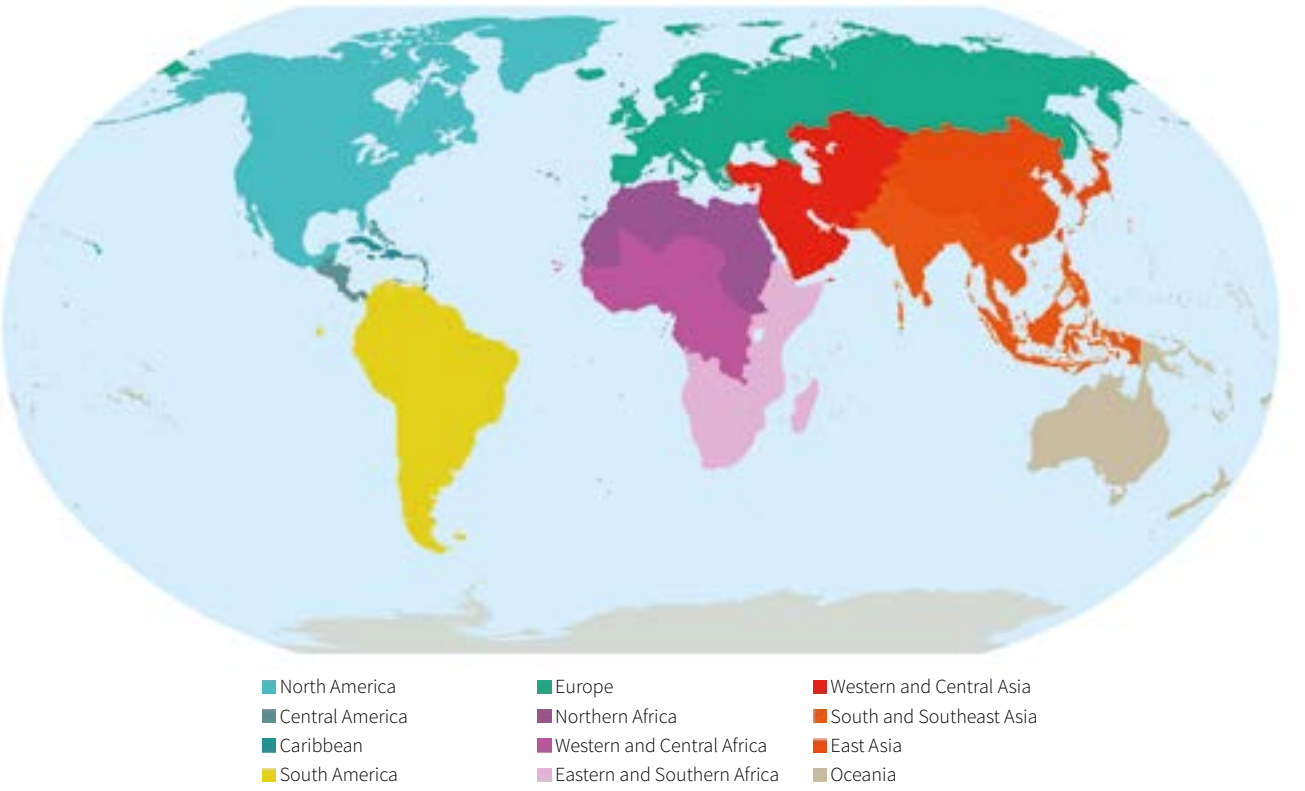
The regional and subregional groupings are the same as those used in previous FRAs (Figure 1).

Data analysis

Data submitted by countries through the online platform were stored in a database for easy retrieval and analysis. Forty-two desk studies, representing 1.6 percent of the total forest area in 2025, were prepared for countries and areas that did not submit reports.

National data were aggregated to derive subregional, regional and global estimates. Trend estimates generally only

FIGURE 1. Regional and subregional breakdown used in the Global Forest Resources Assessment 2025



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map.

include countries that reported complete time series (i.e. for 1990, 2000, 2010, 2015, 2020 and 2025) (although, in some cases, gap-filling was performed for missing values to obtain complete time series for estimates of trends). It is not always possible, therefore, to reproduce the estimates of global, regional and subregional aggregates presented in this report by aggregating the reported country data. Because of the vast size of forest resources in the Russian Federation, data for the rest of Europe are presented separately in some tables.

This report presents the findings of the data analysis, comprising the status of, and main trends in, each variable. Note that numbers given in the text, tables and figures may not sum to the totals indicated and percentages may not tally to 100 due to rounding. Values are generally rounded to three significant figures. Very small numbers and percentages that would otherwise round to zero are shown as "not significant" to indicate that they are non-zero values.

Not all countries and areas reported on all parameters mentioned herein. Annex 2 summarizes the data (by variable) at the global and regional levels, and Annex 3 presents data on forest area and forest characteristics for countries and areas.

Outputs

In addition to this main report, the outputs of FRA 2025 comprise:

- a digital report;
- an interactive story on the main findings of FRA 2025;
- an interactive database with all data and metadata reported to FRA 2025;
- 236 country and area reports in PDF format;
- three FRA working papers – on the country reporting process and voluntary update (FAO, 2023a), the FRA 2025 terms and definitions (FAO, 2023b), and the FRA 2025 guidelines and specifications (FAO, 2023c); and
- scientific papers and special studies using FRA 2025 data produced in collaboration with partner institutions and international experts (in preparation).[5]

[5] All FRA-related materials are available at https://www.fao.org/forest-resources-assessment.

2
Forest extent and change

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Information on forest area and the way it changes over time is essential for measuring progress towards jointly agreed goals and targets, including the SDGs. Forests feature in the SDGs because of their significant contributions to many ecosystem services.

Changes in forest area over time reflect changes in the demand for land for forestry and other land uses but, on its own, this parameter is insufficient to describe and explain complex land-use dynamics. Additional information is needed to understand how much forest has been lost due to conversion to other land uses and how much has been gained due to natural expansion and afforestation. This chapter provides insight into such dynamics, presenting estimates of both deforestation and forest area net change at the regional and global levels (Box 3). It also provides data on two non-forest categories, "other wooded land" (OWL) and "other land with tree cover" (see FAO, 2023b, for definitions of these and other terms used in this publication), both of which are important resources in many countries.

Forest area

STATUS

FRA 2025 received data on (or, for desk studies, made estimates of, based on available information) forest area in 2025 for the 236 countries and areas included in the assessment.

The global forest area in 2025 is estimated at 4.14 billion ha, which is 32 percent of the total land area. This area is equivalent to 0.50 ha of forest per capita,[6] although forests are not distributed equally among the world's people or geographically. Forty-five percent of the world's forests are in the tropical domain, followed by the boreal (28 percent), temperate (17 percent) and subtropical (11 percent) domains (Figure 2). Table 2 shows the distribution of forest area at the regional and subregional levels. Europe accounts for 25 percent of the world's forest area, followed by South America (20 percent), North and Central America (19 percent), Africa (16 percent), Asia (15 percent) and Oceania (4 percent). Figure 3 shows the forest area as a percentage of total land area by region and Figure 4 shows this by countries and areas.

More than half (54 percent) of the world's forest area is in only five countries (in descending order, by forest area) – the Russian Federation, Brazil, Canada, the United States of America and China (these are also the world's five

Box 3. The difference between deforestation and forest area net change

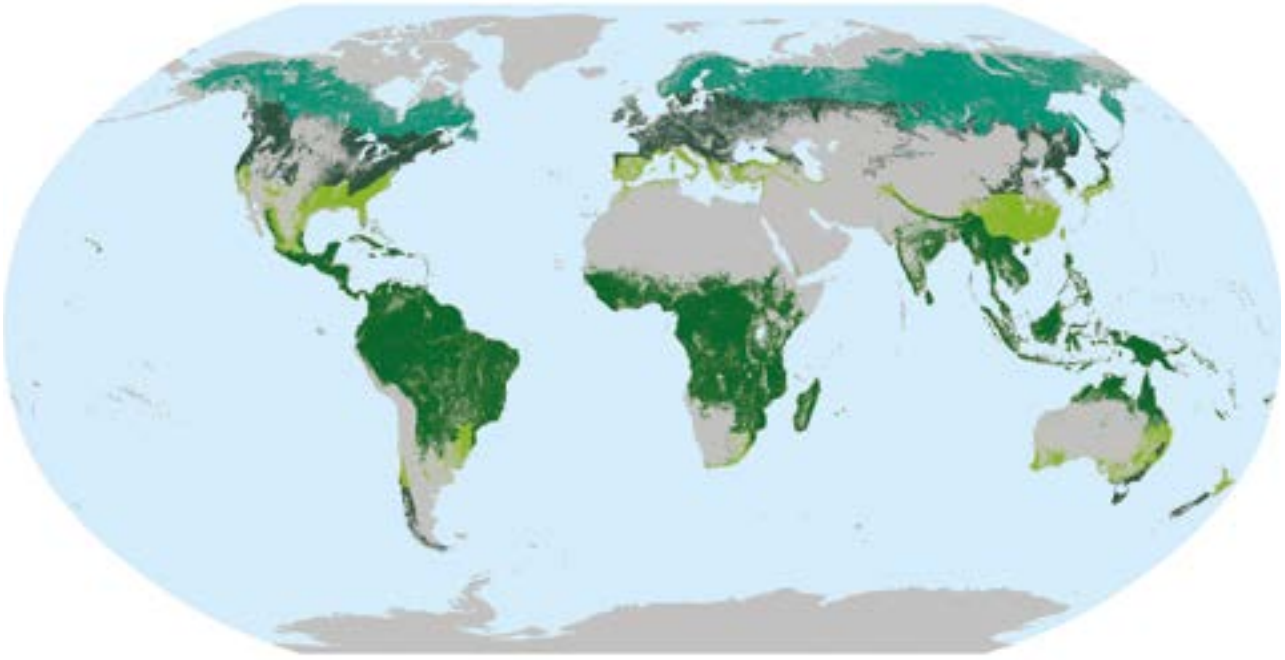
Deforestation is the conversion of forest to other land uses, such as agriculture and infrastructure; thus, deforestation decreases forest area. Forest area can also increase when trees are planted on land that previously was not forested ("afforestation") and when forest expands through natural succession on land that was under a different land use ("natural forest expansion").

Forest area net change is calculated as the difference between the area that is deforested in a given period and the area of forest expansion. Depending on whether forest expansion or deforestation accounts for the larger area, forest area net change can be positive, meaning there was an overall gain in forest area over the period, or negative, meaning there was an overall loss of forest area.

Thus, forest area net change and deforestation are not necessarily the same. Forest area net change is the result of all losses and gains and deforestation takes into account only the area of forest that has been converted to other land uses. For the Global Forest Resources Assessment 2025, net change in forest area has been calculated as the difference in forest area between two points in time.

[6] Calculated assuming a global population of 8.23 billion people, as estimated in: United Nations, Department of Economic and Social Affairs, Population Division (2024). See https://population.un.org/wpp/

FIGURE 2. Distribution of global forest area, by climatic domain, 2025



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. The percentages in the legend indicate the proportion of total forest area in each climatic domain.

Sources: Bourgoin, C., Ameztoy, I., Verhegghen, A., Desclée, B., Carboni, S., Bastin, J., Beuchle, R., *et al.* 2024. *Mapping global forest cover of the year 2020 to support the EU regulation on deforestation-free supply chains*. JRC136960. Luxembourg, Publications Office of the European Union and the Joint Research Centre of the European Commission. https://data.europa.eu/doi/10.2760/262532. FAO. 2012. *Global ecological zones for FAO forest reporting: 2010 update.* Rome. https://openknowledge.fao.org/handle/20.500.14283/ap861e

largest countries in terms of land area, although not in the same order[7]). The ten countries with the largest forest area account for about two-thirds (66 percent) of the world total (Table 3). Seven countries and areas – the Falkland Islands (Malvinas),[8] Gibraltar, Holy See, Monaco, Nauru, Svalbard and Jan Mayen Islands, and Tokelau – reported having no forest at all, and forest accounts for less than 10 percent of the total land area in another 49 countries and areas. Table 4 shows the top ten countries and areas for forest area as a percentage of total land area; among those, the value is 90 percent or above in seven.

TRENDS

For this report, forest-area trends were analysed over a 35-year period in three blocks: 1990–2000, 2000–2015 and 2015–2025. Forest-area estimates were available for six FRA reporting years (i.e. 1990, 2000, 2010, 2015, 2020 and 2025) for all 236 countries and areas (Table 5 shows values for these years by region/subregion). The rate of net forest loss decreased globally from 10.7 million ha per year between 1990–2000 to 3.68 million ha per year in 2000–2015 due mainly to large increases in forest area in Canada, China, the Russian Federation and the United States of America. The annual rate of net forest loss increased in the period 2015–2025, to 4.12 million ha, due to a reduction in the rate of forest gain (i.e. afforestation and natural forest expansion). In China, for example, the net forest gain declined from 2.22 million ha per year in 2000–2015 to 1.69 million ha per year in 2015–2025; in Canada, net forest gain fell from 513 000 ha per year in 2000–2015 to 82 500 ha per year in 2015–2025. In the United States of America, a net forest gain of 437 000 ha per year in 2000–2015 became a net forest loss of 120 000 ha per year in the most recent decade. Figure 5 shows the annual forest area net change by country and area in the period 1990–2025.

Among the regions (Table 6; Figure 6), South America had the highest annual rate of net forest loss in 2015–2025, at 4.10 million ha, down slightly from the rate in 2000–2015

[7] By land area, the world's largest countries are (in descending order, by area) the Russian Federation, China, the United States of America, Canada and Brazil.

[8] A dispute exists between the Government of Argentina and the Government of the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

TABLE 2. **Forest area, by region and subregion, 2025**

Region/subregion	Forest area		
	Total (1 000 ha)	% of world forest area	% of land area
Eastern and Southern Africa	296 113	7	29
Northern Africa	38 972	1	4
Western and Central Africa	327 545	8	32
Africa	**662 630**	**16**	**22**
East Asia	280 246	7	24
South and Southeast Asia	293 515	7	34
Western and Central Asia	56 267	1	5
Asia	**630 029**	**15**	**20**
Europe	**1 038 911**	**25**	**47**
Caribbean	8 399	n.s.	38
Central America	23 782	1	47
North America	743 981	18	36
North and Central America	**776 162**	**19**	**37**
Oceania	**183 898**	**4**	**22**
South America	**848 587**	**20**	**49**
WORLD	**4 140 217**	**100**	**32**

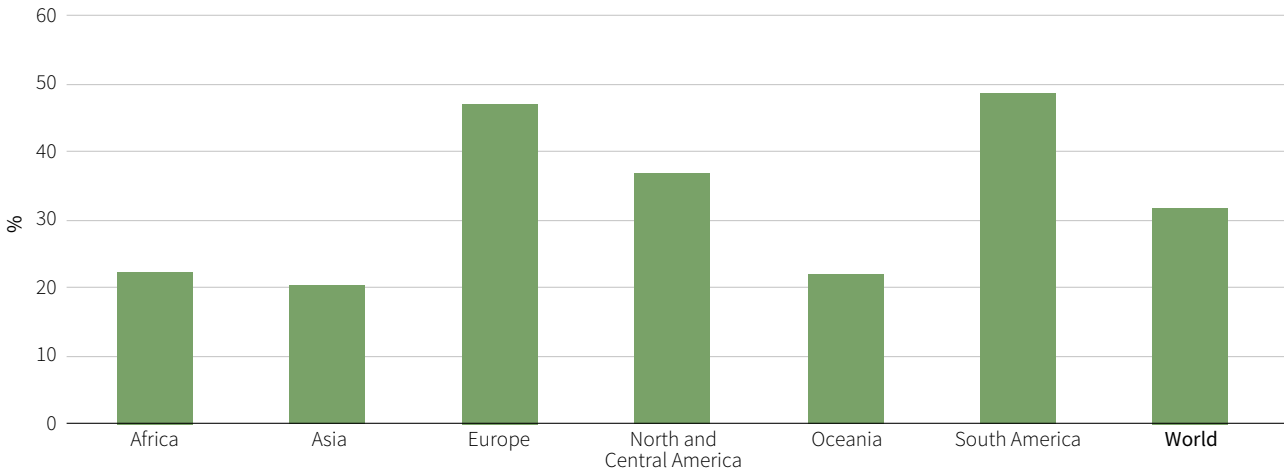
Note: n.s. = not significant.

TABLE 3. **Top ten countries for forest area, 2025**

Ranking	Country	Forest area		
		Total (1 000 ha)	% of world forest area	Cumulative %
1	Russian Federation	832 630	20	20
2	Brazil	486 087	12	32
3	Canada	368 819	9	41
4	United States of America	308 895	7	48
5	China	227 153	5	54
6	Democratic Republic of the Congo	139 189	3	57
7	Australia	133 562	3	60
8	Indonesia	95 969	2	63
9	India	72 739	2	64
10	Peru	67 160	2	66

(4.36 million ha per year) and substantially lower than in 1990–2000 (7.34 million ha per year). All countries in South America reported decreases in forest area since 1990 except Chile and Uruguay, where forest area increased by 1.35 million ha and 1.14 million ha, respectively, between 1990 and 2025 (although Chile reported a decrease in forest area between 2015 and 2025 at a rate of 5 520 ha per year). Brazil indicated a significant reduction in the rate of net forest loss, from 5.77 million ha in 1990–2000 to 3.01 million ha in 2000–2015 and 2.94 million ha in 2015–2025. All countries in the region that reported decreases in forest area since 1990 reported reduced rates of net loss in 2015–2025 compared with 1990–2000, with the exceptions of Guyana and Suriname. In Guyana, the rate of net forest area loss more than doubled, from 3 790 ha per year in 1990–2000 to 8 420 ha per year in 2015–2025. Suriname reported a net

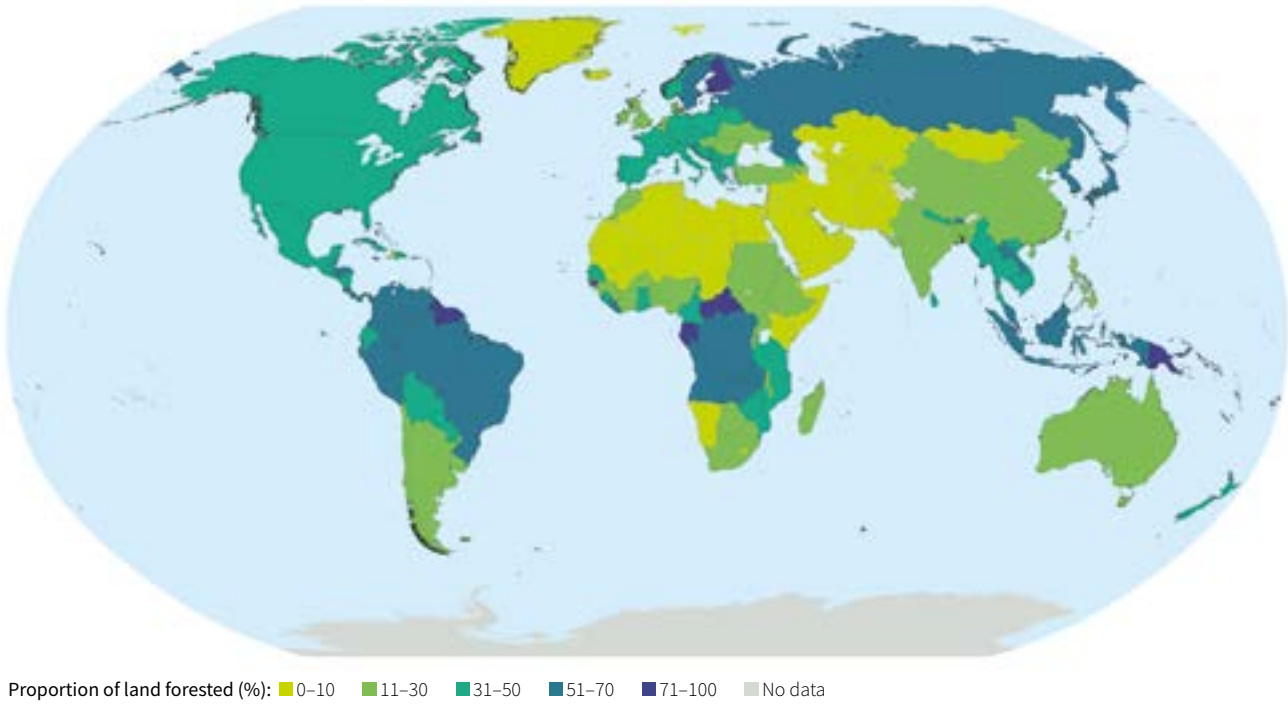
FIGURE 3. Forest area as a percentage of land area, by region and globally, 2025



increase in forest area of 5 370 ha per year in 1990–2000 and a net loss of forest area of 16 400 ha per year in 2015–2025.

The second-highest net loss of forest area in 2015–2025 was in Africa, with Eastern and Southern Africa and Western and Central Africa accounting for most of it. Annual net loss in Africa was 3.28 million ha in 1990–2000, 3.63 million ha in 2000–2015 and 2.96 million ha per year in 2015–2025. The reduction in net forest loss in Africa in the most recent

FIGURE 4. Forest area as a percentage of total land area, by country and area, 2025



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

TABLE 4. Top ten countries and areas for forest area as a percentage of total land area, 2025

Ranking	Country/area	Forest area	
		Total (1 000 ha)	% of total land area
1	French Guiana	7 982	96
2	Suriname	14 674	94
3	Guyana	18 377	93
4	Micronesia (Federated States of)	65	92
5	Gabon	23 555	91
6	Palau	42	91
7	Solomon Islands	2 514	90
8	Equatorial Guinea	2 407	86
9	American Samoa	16	79
10	Pitcairn	4	79

decade was due mainly to the Democratic Republic of the Congo, where net forest loss fell by about 0.5 million ha per year in 2015–2025 compared with 2000–2015.

Forest area decreased in North and Central America by 336 000 ha per year in 1990–2000, increased by 714 000 ha per year in 2000–2015, and decreased again in 2015–2025, by 260 000 ha per year. The United States of America reported a net forest gain of 430 000 ha per year in 2000–2015 and a net loss of 120 000 ha per year in 2015–2025. Canada reported a slowing of the annual net increase in forest area from 513 000 ha in 2000–2015 to 82 500 ha in the most recent decade.

In the Caribbean, forest area increased by 55 500 ha per year in 1990–2000, 64 200 ha per year in 2000–2015 and 14 200 ha per year in 2015–2025.

Of the regions, Asia had the highest net annual gain in forest area in 2015–2025, at 1.62 million ha. Nevertheless, this was substantially lower than the net annual gain in the region in 2000–2015, at 2.40 million ha. Of the Asian subregions, only South and Southeast Asia recorded a net forest loss in 2015–2025. Even in that subregion, however, the loss was only about one-tenth of that recorded in 1990–2000. This can be attributed mainly to Indonesia, which experienced a net loss of 2.44 million ha per year in 1990–2000 but a net gain of 94 100 ha in the most recent decade.

In Western and Central Asia, the annual net gain in forest area almost doubled between 1990–2000 and 2015–2025, from 92 500 ha to 181 000 ha.

There was an overall net gain in forest area in Europe, with the annual rate increasing from 820 000 ha in 1990–2000 to 1.24 million ha in 2000–2015 and 1.44 million ha in 2015–2025. The increase was due mainly to changes in forest area reported by the Russian Federation, where the net

TABLE 5. Forest area, by region and subregion, 1990–2025

Country/area	Forest area (1 000 ha)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	350 403	337 201	321 345	311 779	303 746	296 113
Northern Africa	44 993	43 233	41 561	40 717	39 841	38 972
Western and Central Africa	384 139	366 322	349 990	339 741	333 272	327 545
Africa	**779 536**	**746 757**	**712 895**	**692 237**	**676 859**	**662 630**
East Asia	210 449	230 072	253 705	263 368	272 164	280 246
South and Southeast Asia	320 507	295 693	298 234	295 964	296 401	293 515
Western and Central Asia	51 045	51 970	53 417	54 454	55 364	56 267
Asia	**582 000**	**577 734**	**605 356**	**613 786**	**623 930**	**630 029**
Europe	**997 757**	**1 005 961**	**1 020 629**	**1 024 558**	**1 033 100**	**1 038 911**
Caribbean	6 740	7 295	7 918	8 258	8 355	8 399
Central America	29 626	27 311	25 275	24 866	24 240	23 782
North America	735 033	733 437	742 308	745 634	745 029	743 981
North and Central America	**771 399**	**768 043**	**775 501**	**778 758**	**777 624**	**776 162**
Oceania	**184 416**	**183 050**	**181 119**	**182 499**	**183 303**	**183 898**
South America	**1 028 427**	**955 042**	**905 500**	**889 598**	**870 425**	**848 587**
WORLD	**4 343 534**	**4 236 587**	**4 201 001**	**4 181 435**	**4 165 241**	**4 140 217**

TABLE 6. Annual net change in forest area, by region and subregion, 1990–2025

Region/subregion	1990–2000		2000–2015		2015–2025	
	1 000 ha/year	%	1 000 ha/year	%	1 000 ha/year	%
Eastern and Southern Africa	−1 320	−0.38	−1 695	−0.52	−1 567	−0.51
Northern Africa	−176	−0.40	−168	−0.40	−174	−0.44
Western and Central Africa	−1 782	−0.47	−1 772	−0.50	−1 220	−0.36
Africa	**−3 278**	**−0.43**	**−3 635**	**−0.50**	**−2 961**	**−0.44**
East Asia	1 962	0.90	2 220	0.91	1 688	0.62
South and Southeast Asia	−2 481	−0.80	18.1	0.01	−245	−0.08
Western and Central Asia	92.5	0.18	166	0.31	181	0.33
Asia	**−427**	**−0.07**	**2 403**	**0.40**	**1 624**	**0.26**
Europe	**820**	**0.08**	**1 240**	**0.12**	**1 435**	**0.14**
Caribbean	55.5	0.79	64.2	0.83	14.2	0.17
Central America	−231	−0.81	−163	−0.62	−108	−0.44
North America	−160	−0.02	813	0.11	−165	−0.02
North and Central America	**−336**	**−0.04**	**714**	**0.09**	**−260**	**−0.03**
Oceania	**−137**	**−0.07**	**−37**	**−0.02**	**140**	**0.08**
South America	**−7 339**	**−0.74**	**−4 363**	**−0.47**	**−4 101**	**−0.47**
WORLD	**−10 695**	**−0.25**	**−3 677**	**−0.09**	**−4 122**	**−0.10**

TABLE 7. Top ten countries for annual net loss of forest area, 2015–2025

Ranking	Country	Annual net change	
		1 000 ha/year	%
1	Brazil	−2 942	−0.59
2	Angola	−510	−0.77
3	United Republic of Tanzania	−469	−1.02
4	Myanmar	−290	−1.01
5	Democratic Republic of the Congo	−283	−0.20
6	Mozambique	−267	−0.79
7	Cambodia	−251	−3.29
8	Peru	−239	−0.35
9	Bolivia (Plurinational State of)	−232	−0.42
10	Paraguay	−207	−1.34

TABLE 8. Top ten countries for annual net gain in forest area, 2015–2025

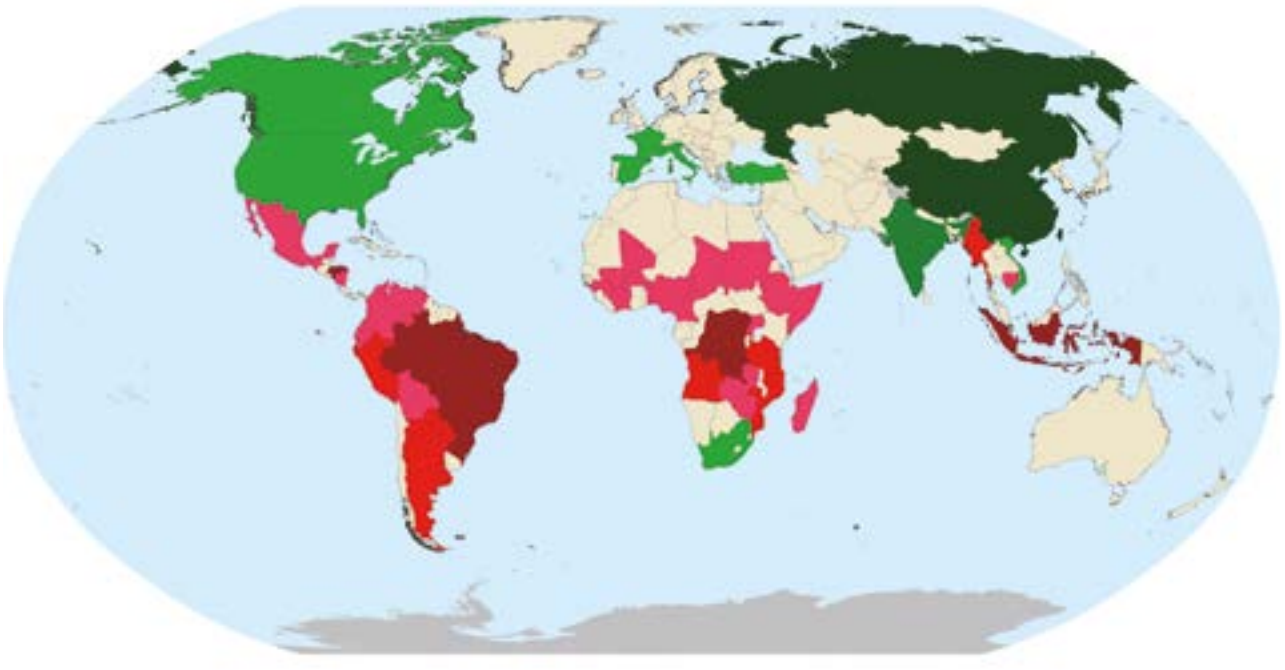
Ranking	Country	Annual net change	
		1 000 ha/year	%
1	China	1 686	0.77
2	Russian Federation	942	0.11
3	India	191	0.27
4	Türkiye	118	0.53
5	Australia	105	0.08
6	France	95.9	0.56
7	Indonesia	94.1	0.10
8	South Africa	87.6	0.39
9	Canada	82.5	0.02
10	Viet Nam	72.8	0.51

forest-area gain increased from 80 400 ha per year in 1990–2000 to 71 000 ha per year in 2000–2015 and 942 000 ha per year in 2015–2025.

The net forest-area gain in Oceania of 140 000 ha per year in 2015–2025 reversed the region's negative trend of previous decades. This mainly reflects changes reported by Australia, where there were annual net forest losses of 167 000 ha in 1990–2000 and 26 700 ha in 2000–2015 but an annual net gain of 105 000 ha in 2015–2025. A net increase in forest area reported by New Zealand and a reduced rate of net forest loss reported by Papua New Guinea also contributed to the trend.

Table 7 shows the top ten countries worldwide for average annual net loss of forest area between 2015 and 2025. Table 8 shows the top ten countries for average annual net gain in forest area in the same period.

FIGURE 5. Annual forest area net change, by country and area, 1990–2025

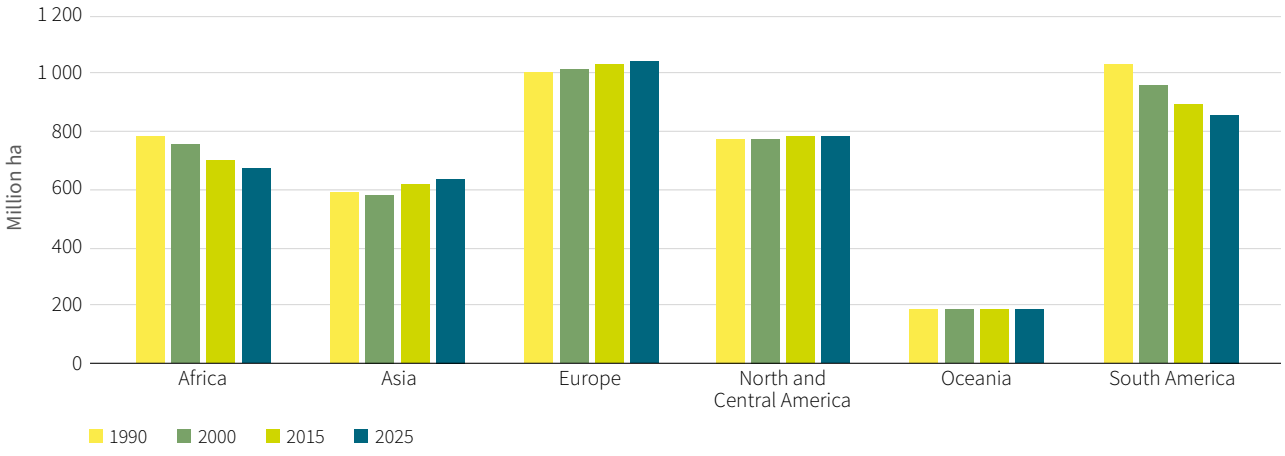


1 000 ha/year

Net gain: >501 251–500 51–250 Small changes: >±50 Net loss: >501 251–500 51–250 No data

Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

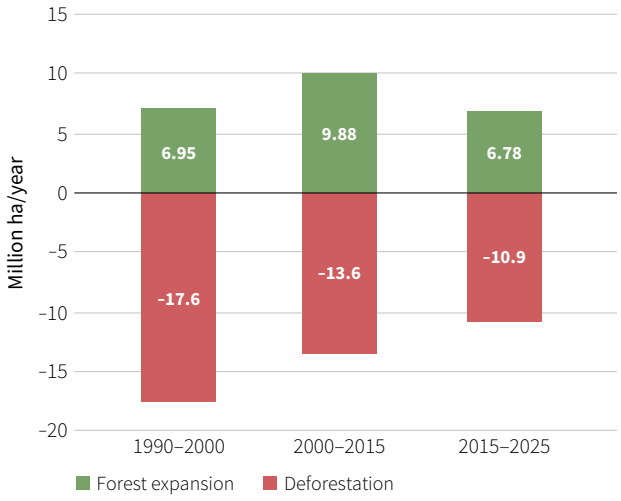
FIGURE 6. Forest area, by region, 1990–2025



Deforestation

Because information on forest area net change is insufficient to describe the complexity of land-use dynamics, countries were asked to provide estimates of forest expansion (afforestation and natural forest expansion) and deforestation for FRA 2025. The collected data enabled an estimation of the deforestation rate at the regional and global levels and by climatic domain in 1990–2025.

FIGURE 7. Annual rate of forest expansion and deforestation, 1990–2025



Note: The sum of figures for forest expansion and deforestation presented here might not equal estimates of net forest area change given elsewhere in the report because the former include FAO estimates and net forest area change is derived entirely from complete time series of forest-area data, as provided in the reports for countries and areas.

TABLE 9. Deforestation rate, by climatic domain, 1990–2025

Climatic domain	Deforestation (million ha/year)		
	1990–2000	2000–2015	2015–2025
Boreal	0.10	0.12	0.13
Temperate	0.54	0.59	0.62
Subtropical	1.09	0.91	0.73
Tropical	15.9	11.9	9.42
Total	**17.6**	**13.6**	**10.9**

An estimated 489 million ha of forest was lost through deforestation between 1990 and 2025, although the rate slowed over the period. The annual rate of deforestation was 17.6 million ha in 1990–2000, 13.6 million ha in 2000–2015 and 10.9 million ha in 2015–2025 (Figure 7).

Most deforestation (88 percent) between 1990 and 2025 occurred in the tropical domain, although the annual rate of deforestation there decreased from 15.9 million ha in 1990–2000, to 11.9 million ha in 2000–2015, to 9.42 million ha in 2015–2025 (Table 9). The annual rate of deforestation decreased in the subtropical domain, from 1.09 million ha in 1990–2000 to 0.73 million ha in 2015–2025, but increased slightly in the temperate and boreal domains.

TABLE 10. Deforestation rate, by region and subregion, 1990–2025

Region/subregion	Deforestation (1 000 ha/year)		
	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	1 448	1 828	1 773
Northern Africa	321	307	282
Western and Central Africa	1 847	1 943	1 398
Africa	**3 615**	**4 077**	**3 453**
East Asia	351	333	313
South and Southeast Asia	3 593	2 103	1 585
Western and Central Asia	2.58	63.3	124
Asia	**3 947**	**2 500**	**2 023**
Europe	**126**	**160**	**145**
Caribbean	20.3	11.6	30.0
Central America	292	263	201
North America	731	381	339
North and Central America	**1 043**	**655**	**570**
Oceania	**677**	**628**	**491**
South America	**8 238**	**5 533**	**4 222**
WORLD	**17 646**	**13 553**	**10 905**

South America had the highest annual deforestation rate in 2015–2025, at 4.22 million ha, a drop of nearly 50 percent from the rate in the region in 1990–2000 (8.24 million ha) (Table 10). In Africa, the deforestation rate of 4.08 million ha in 2000–2015 (mainly reflecting trends in Eastern and Southern Africa and Western and Central Africa) declined to 3.45 million ha per year in 2015–2025. Africa and Europe were the only regions in which the deforestation rate increased between 1990–2000 and 2000–2015 (from 3.62 million ha per year to 4.08 million ha per year in Africa and from 126 000 ha per year to 160 000 ha per year in Europe), although the rates in both regions decreased in 2015–2025 (to 3.45 million ha per year in Africa and 145 000 ha per year in Europe).

Although the reporting on deforestation, afforestation and natural forest expansion in FRA 2025 has improved compared with previous assessments, major gaps and deficiencies remain because many countries and areas do not collect data on these parameters. Therefore, estimates of forest-area change dynamics in FRA 2025 should be viewed with caution.

Other land with tree cover

STATUS

The category "other land with tree cover" comprises areas found in rural landscapes and urban settings that meet the thresholds for tree cover established by FAO's forest definition but for which the land use is not forest (and therefore the land does not meet FAO's forest definition). This category is reported because of its importance in the provision of goods and services. It has four subcategories: (1) trees in urban settings; (2) tree orchards; (3) palms; and (4) agroforestry.

Table 11 shows estimated areas in each of these subcategories, by region and subregion. Not all countries and areas reported on all four subcategories, and the overall reporting coverage is quite low. Therefore, the estimates presented here should be viewed with caution.

Ninety-one countries and areas reported a total land area subject to agroforestry of 55.4 million ha in 2025. The majority (39.3 million ha) of this area is in Asia, mostly South and Southeast Asia, with India and Indonesia accounting for almost 100 percent of the regional total and for 70 percent of the global total.

Overall, there is an estimated 12.8 million ha of palms globally, as reported by 125 countries and areas. Of the regions, the largest area (8.10 million ha) is in Asia, mostly South and Southeast Asia, with Malaysia and Thailand accounting for 87 percent of the regional total and for 55 percent of the global total.

One-hundred and eleven countries and areas reported a total area of tree orchards of 32.1 million ha, mostly in Asia (12.1 million ha), Europe (8.44 million ha) and Africa (7.32 million ha).

Sixty-one countries and areas reported on trees in urban settings, with a total of 26.9 million ha, of which more than 70 percent (19.5 million ha) is in North and Central America.

Figure 8 shows, at the global level, trends in the area of other land with tree cover between 1990 and 2025.

TRENDS

The trend data presented here are based on those countries that reported complete time series for individual categories. Therefore, the regional aggregates are lower than those presented above.

Sixty-seven countries and areas reported trend data for agroforestry, with the area of land subject to this land use increasing by 5.27 million ha between 1990 and 2025; there were increases in all regions except North and Central America and Africa, where the area decreased, and Oceania, where there was little change. Globally, the biggest increase in the area of agroforestry was in 1990–2000, mainly in South and Southeast Asia, with Indonesia reporting an agroforestry area of 22.0 million ha in 1990 and 25.7 million ha in 2000.

The analysis of trends for palms was based on data reported by 111 countries and areas. The area of palms more than doubled between 1990 and 2025, increasing at an average of 153 000 ha per year over the period. The increases occurred in all regions, although Asia accounted for more than 80 percent of the global increase.

Eighty-five countries and areas reported on trends in tree-orchard area, which increased globally by 8.08 million ha between 1990 and 2025. Asia contributed a large part of this, with China reporting that its area of tree orchards more than doubled between 1990 and 2000 before stabilizing thereafter. The area also increased in Africa and South America, but it decreased in Europe, North and Central America, and Oceania.

Forty-nine countries reported on the area of trees in urban settings for FRA 2025. Globally, the area increased by 8.94 million ha between 1990 and 2025 at a rate of

FIGURE 8. Global area of other land with tree cover, by subcategory, 1990–2025

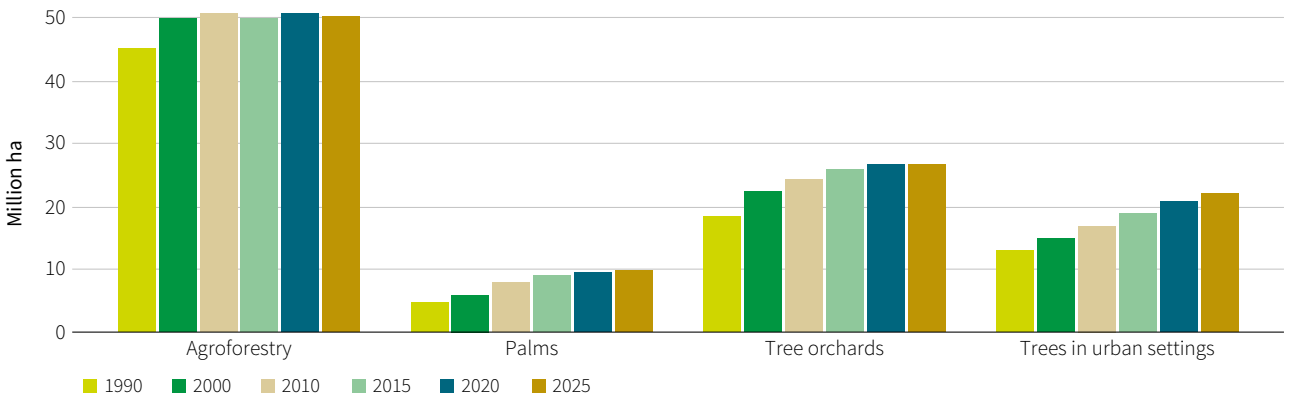


TABLE 11. Area of other land with tree cover, by subcategory, region and subregion, 2025

Region/subregion	Agroforestry		Palms		Tree orchards		Trees in urban settings	
	No. of reporting countries/ areas	Area (1 000 ha)	No. of reporting countries/ areas	Area (1 000 ha)	No. of reporting countries/ areas	Area (1 000 ha)	No. of reporting countries/ areas	Area (1 000 ha)
Eastern and Southern Africa	8	4 120	6	37.2	6	326	3	1.56
Northern Africa	3	378	5	386	5	5 185	4	1 049
Western and Central Africa	9	4 885	12	2 400	11	1 811	1	1.70
Africa	**20**	**9 382**	**23**	**2 823**	**22**	**7 321**	**8**	**1 052**
East Asia	2	0	3	260	5	10 008	3	359
South and Southeast Asia	6	38 736	8	7 579	8	1 365	3	1 500
Western and Central Asia	8	518	11	249	12	708	9	1 856
Asia	**16**	**39 254**	**22**	**8 088**	**25**	**12 081**	**15**	**3 715**
Europe	**25**	**856**	**45**	**0.40**	**31**	**8 440**	**20**	**2 589**
Caribbean	9	158	8	13.8	8	199	7	16.2
Central America	6	1 420	5	573	5	80.8	1	7.89
North America	3	1 366	5	94.5	5	2 213	3	19 469
North and Central America	**18**	**2 945**	**18**	**681**	**18**	**2 493**	**11**	**19 493**
Oceania	**4**	**10.2**	**9**	**204**	**6**	**23.6**	**3**	**1.00**
South America	**8**	**2 939**	**8**	**1 010**	**9**	**1 752**	**4**	**51.5**
WORLD	**91**	**55 387**	**125**	**12 807**	**111**	**32 112**	**61**	**26 902**

TABLE 12. Area of other wooded land, by region and subregion, 2025

Region/subregion	Area of other wooded land	
	Total (1 000 ha)	% of land area
Eastern and Southern Africa	299 629	30
Northern Africa	66 566	7
Western and Central Africa	115 992	11
Africa	**482 187**	**16**
East Asia	108 440	9
South and Southeast Asia	48 110	6
Western and Central Asia	24 727	2
Asia	**181 277**	**6**
Europe	**124 512**	**6**
Caribbean	3 616	16
Central America	4 140	8
North America	77 196	4
North and Central America	**84 952**	**4**
Oceania	**43 535**	**5**
South America	**174 886**	**10**
WORLD	**1 091 349**	**8**

TABLE 13. Top ten countries for area of other wooded land, 2025

Ranking	Country	Area of other wooded land	
		Total (1 000 ha)	% of land area
1	China	105 795	11
2	Russian Federation	100 397	6
3	Namibia	54 081	66
4	Ethiopia	45 672	40
5	Argentina	44 575	16
6	Australia	39 581	5
7	Brazil	38 331	5
8	Peru	37 930	30
9	Kenya	37 174	65
10	South Africa	35 759	29

TABLE 14. Area of other wooded land and annual change, by region and subregion, 1990–2025

Region/subregion	Area (1 000 ha)						Annual change (1 000 ha/year)		
	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	314 498	309 582	303 897	300 986	298 940	299 629	−492	−573	−136
Northern Africa	64 701	65 224	65 730	65 983	66 295	66 566	52.3	50.6	58.3
Western and Central Africa	146 289	139 062	130 955	126 069	121 050	115 992	−723	−866	−1 008
Africa	**525 488**	**513 868**	**500 582**	**493 038**	**486 284**	**482 187**	**−1 162**	**−1 389**	**−1 085**
East Asia	104 143	102 421	107 743	109 967	104 437	108 440	−172	503	−153
South and Southeast Asia	53 428	53 317	51 829	54 508	50 714	48 110	−11.1	79.4	−640
Western and Central Asia	21 712	22 415	22 903	23 157	23 772	24 727	70.3	49.4	157
Asia	**179 283**	**178 154**	**182 476**	**187 632**	**178 923**	**181 277**	**−113**	**632**	**−636**
Europe	**102 486**	**104 533**	**121 292**	**120 612**	**119 319**	**124 512**	**205**	**1 072**	**390**
Caribbean	2 556	2 687	2 968	3 185	3 405	3 616	13.1	33.2	43.1
Central America	6 094	5 121	4 235	4 182	4 159	4 140	−97.3	−62.6	−4.19
North America	72 491	72 631	72 014	76 994	77 809	77 196	14.0	291	20.2
North and Central America	**81 141**	**80 438**	**79 217**	**84 362**	**85 373**	**84 952**	**−70.2**	**262**	**59.1**
Oceania	**37 615**	**37 902**	**42 373**	**42 072**	**43 515**	**43 535**	**28.7**	**278**	**146**
South America	**188 878**	**182 940**	**178 520**	**177 559**	**176 457**	**174 886**	**−594**	**−359**	**−267**
WORLD	**1 114 891**	**1 097 835**	**1 104 460**	**1 105 274**	**1 089 872**	**1 091 349**	**−1 706**	**496**	**−1 393**

255 000 ha per year. Increases were observed in all regions except Oceania, where the area was steady over the period. The largest increase was in North and Central America, due mainly to the United States of America.

Other wooded land

STATUS

FRA 2025 received information on the area of OWL in 2025 from all 236 countries and areas. The area of OWL worldwide is estimated at 1.09 billion ha, which is 8 percent of the total land area (Table 12). Africa has the largest area of OWL (482 million ha), followed by Asia (181 million ha), South America (175 million ha), Europe (125 million ha), North and Central America (85.0 million ha) and Oceania (43.5 million ha). Table 13 shows the top ten countries for OWL, five of which (Australia, Brazil, China, Peru and the Russian Federation) are also in the top ten for forest area.

TRENDS

Worldwide, the area of OWL decreased by 23.5 million ha between 1990 and 2025. The rate of decline averaged 1.71 million ha per year in 1990–2000 and 1.39 million ha per year in 2015–2025 (Table 14). An annual increase of 496 000 ha was registered in 2000–2015, due mainly to data reported by the Russian Federation; this can mostly be attributed to a change in the data-collection methodology rather than to an actual increase in the area of OWL.

In South America, the rate of decrease in the area of OWL slowed significantly in 2015–2025, due mainly to an increase reported by Colombia and to a reduced loss reported by Brazil. There were large declines in OWL in the two subregions of Western and Central Africa and Eastern and Southern Africa between 1990 and 2025, driven mainly by losses in Chad (Western and Central Africa) and Madagascar (Eastern and Southern Africa). Conversely, there were slight gains in OWL in Northern Africa over the period.

Trends in the area of OWL should be viewed with caution because many countries face challenges in monitoring this parameter, largely associated with difficulties in measuring tree-canopy cover in the range of 5–10 percent. Therefore, reliable data on the area of OWL are often lacking.

3 Forest characteristics

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Forests encompass a wide range of ecosystems that vary considerably in their characteristics, such as species composition, structure and the extent of modification by humans and by non-human factors. FRA identifies two broad categories of forest: naturally regenerating and planted (Figure 9). There is ongoing discussion on the functions and values of these two forest categories. Naturally regenerating forests (also called natural forests) generally contribute more to biodiversity conservation and provide a wider range of ecosystem services than planted forests. Forests and trees are planted for many purposes, such as the production of wood, fibre, fuel and non-wood forest products, the protection of soil and water, and ecosystem restoration. Although not always matching the diversity or environmental benefits of natural forests, sustainably managed planted forests can help reduce harvesting pressure on natural forests and also provide important ecosystem services. There is a continuum in forests, from primary forests in which there is no visible indications of past or present human activity at one extreme to intensively managed plantation forests of introduced species managed primarily for single products at the other; between these are naturally regenerating and planted forests with varying degrees of human intervention. In addition to the two broad categories of naturally regenerating and planted forests, FRA 2025 asked countries and areas to provide information on primary forests as a subcategory of naturally regenerating forests and on plantation forests and other planted forests as subcategories of planted forests. Countries were also asked to estimate the proportion of their plantation forests composed predominantly of introduced species.

In addition, information was collected on mangroves, bamboo forests and rubberwood plantations.

FIGURE 9. The two categories of planted forest

PLANTED FOREST
Forest predominantly composed of trees established planting and/or deliberate seeding

PLANTATION FOREST

Planted forest that is intensively managed and meets all the following criteria at planting and stand maturity: one or two species; even age class; and regular spacing. Plantation forests are established for the production of timber, fibre, energy and non-wood forest products. Plantation forests mainly composed of introduced species represent a subcategory of plantation forests.

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OTHER PLANTED FOREST

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Planted forest that does not meet the criteria of a plantation forest and may even resemble and may even resemble a naturally regenerating forest at stand maturity. Other planted forests may be established for purposes such as ecosystem restoration and the protection of soil and water.

TABLE 15. Area of naturally regenerating forest, by region and subregion, 2025

Region/subregion	Area of naturally regenerating forest	
	Total (1 000 ha)	% of total forest area
Eastern and Southern Africa	290 492	98
Northern Africa	36 638	94
Western and Central Africa	321 416	98
Africa	**648 546**	**98**
East Asia	173 702	62
South and Southeast Asia	260 714	89
Western and Central Asia	49 489	88
Asia	**483 904**	**77**
Europe	**956 806**	**92**
Caribbean	7 451	89
Central America	23 176	97
North America	695 716	94
North and Central America	**726 342**	**94**
Oceania	**178 971**	**97**
South America	**831 256**	**98**
WORLD	**3 825 826**	**92**

Naturally regenerating forest

STATUS

FRA 2025 received information on the area of naturally regenerating forests in 2025 from 229 countries and areas representing nearly 100 percent of the world's forest area. Naturally regenerating forests account for 92 percent (3.83 billion ha) of the total forest area. Of the regions, Europe has the largest area in this forest category, followed by South America, North and Central America, Africa, Asia, and Oceania (Table 15). Naturally regenerating forests comprise 98 percent of the total forest area in Africa and South America and 97 percent in Oceania. They constitute 100 percent of the forest resource in 38 countries.

TRENDS

FRA 2025 received information on trends in naturally regenerating forests over the 35-year period between 1990 and 2025 from 224 countries and areas constituting 99 percent of the world's forest area. According to this information, the area of naturally regenerating forests decreased by 324 million ha between 1990 and 2025 (Table 16). The overall rate of net loss slowed in each analysed period, from 13.8 million ha per year in 1990–2000, to 7.75 million ha per year in 2000–2015, to 6.97 million ha per year in 2015–2025 (Table 17 and Figure 10).

TABLE 16. Area of naturally regenerating forest, by region and subregion, 1990–2025

Region/subregion	Area of naturally regenerating forest (1 000 ha)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	346 110	332 557	316 349	306 622	298 320	290 492
Northern Africa	43 167	41 221	39 404	38 504	37 558	36 638
Western and Central Africa	381 310	363 103	345 812	334 931	327 680	321 416
Africa	**770 586**	**736 881**	**701 565**	**680 058**	**663 558**	**648 546**
East Asia	152 970	161 574	166 456	170 394	170 192	173 702
South and Southeast Asia	298 668	272 193	272 040	267 696	264 320	260 714
Western and Central Asia	45 672	46 166	47 123	47 874	48 784	49 489
Asia	**497 310**	**479 933**	**485 619**	**485 963**	**483 296**	**483 904**
Europe	**913 116**	**916 413**	**925 159**	**926 857**	**933 907**	**939 164**
Caribbean	6 266	6 811	7 203	7 373	7 433	7 451
Central America	29 567	27 128	24 970	24 520	23 801	23 176
North America	712 417	701 424	702 519	702 903	699 007	695 716
North and Central America	**748 251**	**735 363**	**734 692**	**734 796**	**730 241**	**726 342**
Oceania	**181 570**	**179 207**	**176 407**	**177 804**	**178 682**	**178 971**
South America	**1 021 782**	**946 394**	**891 590**	**872 424**	**853 205**	**831 256**
WORLD	**4 132 615**	**3 994 191**	**3 915 031**	**3 877 903**	**3 842 888**	**3 808 184**

TABLE 17. **Annual net change in the area of naturally regenerating forest, by region and subregion, 1990–2025**

Region/subregion	1990–2000		2000–2015		2015–2025	
	1 000 ha/year	%	1 000 ha/year	%	1 000 ha/year	%
Eastern and Southern Africa	−1 355	−0.40	−1 729	−0.54	−1 613	−0.54
Northern Africa	−195	−0.46	−181	−0.45	−187	−0.50
Western and Central Africa	−1 821	−0.49	−1 878	−0.54	−1 352	−0.41
Africa	**−3 371**	**−0.45**	**−3 788**	**−0.53**	**−3 151**	**−0.47**
East Asia	860	0.55	588	0.35	331	0.19
South and Southeast Asia	−2 648	−0.92	−300	−0.11	−698	−0.26
Western and Central Asia	49.4	0.11	114	0.24	162	0.33
Asia	**−1 738**	**−0.36**	**402**	**0.08**	**−206**	**−0.04**
Europe	**330**	**0.04**	**696**	**0.08**	**1 231**	**0.13**
Caribbean	54.5	0.84	37.5	0.53	7.74	0.10
Central America	−244	−0.86	−174	−0.67	−134	−0.56
North America	−1 099	−0.16	98.6	0.01	−719	−0.10
North and Central America	**−1 289**	**−0.17**	**−37.8**	**−0.01**	**−845**	**−0.12**
Oceania	**−236**	**−0.13**	**−93.5**	**−0.05**	**117**	**0.07**
South America	**−7 539**	**−0.76**	**−4 931**	**−0.54**	**−4 117**	**−0.48**
WORLD	**−13 842**	**−0.34**	**−7 753**	**−0.20**	**−6 972**	**−0.18**

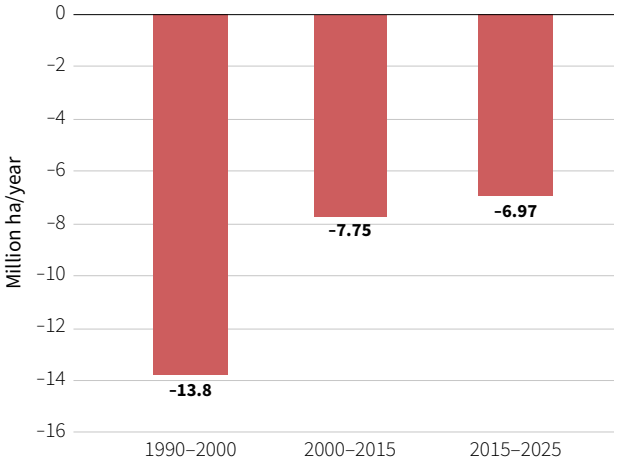
The area of naturally regenerating forests decreased between 2015 and 2025 in all regions except Europe and Oceania. The biggest net loss was in South America, where the area of naturally regenerating forests declined at an average of 4.12 million ha per year, down from 4.93 million ha per year in 2000–2015 and 7.54 million ha in 1990–2000.

The annual rate of net loss of naturally regenerating forest increased in Africa between 1990–2000 and 2000–2015, from 3.37 million ha to 3.79 million ha. The rate decreased in 2015–2025, to 3.15 million ha per year, due mainly to a reduction in forest loss in Western and Central Africa.

The area of naturally regenerating forest decreased to varying extents in North and Central America in each of the three analysed periods (i.e. 1990–2000, 2000–2015 and 2015–2025). The annual rate of net loss (845 000 ha) in the latter of these periods was considerably lower than in 1990–2000, when it was 1.29 million ha, due mainly to a decline in annual loss in North America. The area of naturally regenerating forest increased in the Caribbean in each period.

Asia experienced a net loss of naturally regenerating forest of 206 000 ha per year in 2015–2025, due to losses in South and Southeast Asia and despite gains in East Asia and Western and Central Asia. Asia's overall rate of loss of naturally regenerating forest in 2015–2025 was a substantial reduction compared with 1990–2000, when it was about eight times higher, at 1.74 million ha per year. The reduction was due to declines in forest loss in South and Southeast Asia, especially Indonesia, which reported a net loss of 2.45 million ha per year in 1990–2000 and a net gain of 12 500 ha per year in 2015–2025.

FIGURE 10. Global annual net change in naturally regenerating forest, 1990–2025



The area of naturally regenerating forest increased in Europe in each of the analysed periods, with the annual

rate of increase doubling from 330 000 ha in 1990–2000 to 696 000 ha in 2000–2015 and growing again to 1.23 million ha in 2015–2025. This mainly reflects increases reported by the Russian Federation, with growth in the rest of Europe relatively moderate, at a net gain of 323 000 ha per year in the most recent decade.

The area of naturally regenerating forest in Oceania increased at a rate of 117 000 ha per year in 2015–2025, reversing the losses that occurred in 1990–2000 (236 000 ha per year) and 2000–2015 (93 500 ha per year).

Primary forest

STATUS

Primary forests are naturally regenerated forests of native tree species in which there are no clearly visible indications of human activities and ecological processes are not significantly disturbed. Primary forests – especially primary tropical moist forests – are highly species-rich, diverse ecosystems, and their extent is an important environmental indicator. FRA 2025 received information on the area of primary forest in 2025 from 168 countries and areas representing 85 percent of the world's forest area.

To improve the consistency and reliability of reported data on primary forests, the FRA team is conducting a study to provide countries with additional guidance and reporting tools (Box 4).

Based on the provided data, the area of primary forests worldwide is estimated at 1.18 billion ha, or about one-third (33 percent) of the forest area of reporting countries and areas (Table 18).

Among the regions, Europe has the largest area of primary forest, at 311 million ha (although, when data for the Russian Federation are subtracted, Europe has only 4.32 million ha), followed by South America (299 million ha) and North and Central America (280 million ha). Africa has an estimated 163 million ha of primary forest, Asia 85.2 million ha and Oceania 38.3 million ha. Primary forest accounts for 49 percent of the total forest area in South America, 38 percent in Africa, 37 percent in North and Central America, 32 percent in Europe and 21 percent in Oceania. Asia has the lowest proportion of primary forest, at 15 percent of its total forest area. If data for the Russian Federation are subtracted, however, Europe has the lowest share of primary forest, at 3 percent of its total forest area. Table 19 shows the top five countries and areas for primary forest as a proportion of total

TABLE 18. Area of primary forest, by region and subregion, 2025

Region/subregion	Data availability		Area of primary forest		
	No. of reporting countries/areas	% of total forest area	Total (1 000 ha)	As % of total forest area of reporting countries/areas	% of global area of primary forest
Eastern and Southern Africa	12	40	33 630	28	3
Northern Africa	8	82	1 136	4	n.s
Western and Central Africa	20	83	128 670	47	11
Africa	**40**	**64**	**163 436**	**38**	**14**
East Asia	2	90	15 927	6	1
South and Southeast Asia	15	94	66 622	24	6
Western and Central Asia	18	88	2 676	5	n.s.
Asia	**35**	**92**	**85 225**	**15**	**7**
Europe, with data for the Russian Federation subtracted	40	73	4 316	3	n.s.
Europe	**41**	**95**	**310 961**	**32**	**26**
Caribbean	19	95	487	6	n.s.
Central America	1	6	1 197	91	n.s.
North America	5	100	277 878	37	24
North and Central America	**25**	**97**	**279 561**	**37**	**24**
Oceania	**19**	**99**	**38 349**	**21**	**3**
South America	**8**	**72**	**298 609**	**49**	**25**
WORLD	**168**	**85**	**1 176 142**	**33**	**100**

Note: n.s. = not significant.

forest area: four of these reported proportions of more than 90 percent, including Maldives, where 100 percent of the forest area was reported as primary forest, mainly because all forests in the country are on uninhabited islands. Five countries – in descending order by primary-forest area, the Russian Federation, Brazil, Canada, the Democratic Republic of the Congo and Indonesia – account for 75 percent of the global primary-forest area (Table 20).

TRENDS

FRA 2025 received information on trends in primary-forest area from 162 countries and areas representing 77 percent of the world's forest area. This reflects improved reporting in terms of data availability for trend estimates compared with previous FRAs, although efforts are still needed to ensure reliability. Moreover, the data do not indicate whether decreases in primary-forest area are due to deforestation or conversion to other forest types (such as naturally regenerating or planted forest).

Globally, there was a net decrease in primary-forest area of 110 million ha between 1990 and 2025. The average annual rate of net loss increased from 3.48 million ha in 1990–2000 to 3.92 million ha in 2000–2015 and then dropped substantially in the most recent decade, to 1.61 million ha (Table 21).

TABLE 19. Top five countries and areas for primary forest as a proportion of total forest area, 2025

Ranking	Country/area	Primary-forest area	
		Total (1 000 ha)	% of total forest area
1	Maldives	3.72	100
2	French Guiana	7 587	95
3	Cook Islands	14.4	92
4	Belize	1 197	91
5	Réunion	66.0	86

There has been a net decrease in primary-forest area in all regions except Europe since 1990. The annual rate of net loss in Africa, North and Central America and South America was lower in 2015–2025 than in the other analysed periods (i.e. 1990–2000 and 2000–2015); it was highest in 2000–2015. There was a net increase in primary-forest area in Asia in the most recent decade after declines in the other two analysed periods.

The highest average annual net loss of primary-forest area in 2015–2025 was in South America, at 1.04 million ha, down from 1.32 million ha in 1990–2000 and 1.34 million ha in 2000–2015. The decline in the rate of net loss in the last decade was due mostly to Brazil, which reported an annual net loss of 895 000 ha in 2015–2025, down from 1.15 million ha in 2000–2015.

The annual rate of primary-forest net loss in Africa was 548 000 ha in 2015–2025, down substantially from 751 000 ha in 1990–2000 and 995 000 ha in 2000–2015. The decrease was due mainly to the Democratic Republic of the Congo, where the rate of net loss more than halved, from 565 000 ha per year in 2000–2015 to 204 000 ha per year in the most recent decade. The annual rate of primary-forest net loss increased in Eastern and Southern Africa, from 118 000 ha in 1990–2000 to 300 000 ha in 2000–2015 and 294 000 ha in 2015–2025, due mainly to Angola, which reported an annual net loss of 199 000 ha in 2015–2025, more than three times higher than in 1990–2000 (59 000 ha).

The area of primary forest in North and Central America declined by 516 000 ha per year in 1990–2000 and by 1.50 million ha per year in 2000–2015, but the rate of net loss decreased substantially in 2015–2025, to 327 000 ha per year. The increase in the rate of net loss in 2000–2015 mainly reflected data reported by Canada, which, due to the use of a different dataset for estimates of primary-forest area, may not reflect the actual trend and therefore should be interpreted with caution. The United States of America did not report data on trends in primary-forest area and provided an estimate of the area for 2025.

TABLE 20. Top five countries for primary-forest area, 2025

Ranking	Country	Primary-forest area		
		Total (1 000 ha)	% of global primary-forest area	Cumulative %
1	Russian Federation	306 645	26	26
2	Brazil	224 502	19	45
3	Canada	200 316	17	62
4	Democratic Republic of the Congo	100 216	9	71
5	Indonesia	46 648	4	75

TABLE 21. Area of primary forest and annual net change, by region and subregion, 1990–2025

Region/subregion	Area of primary forest										
	Data availability		Total (1 000 ha)						Annual net change (1 000 ha/year)		
	No. of reporting countries/areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	12	40	42 238	41 061	38 185	36 567	35 099	33 630	−118	−300	−294
Northern Africa	8	82	1 136	1 136	1 136	1 136	1 136	1 136	0	0	0
Western and Central Africa	20	83	147 983	141 652	135 449	131 215	129 899	128 670	−633	−696	−254
Africa	**40**	**64**	**191 356**	**183 849**	**174 770**	**168 918**	**166 135**	**163 436**	**−751**	**−995**	**−548**
East Asia	1	81	11 646	11 453	11 453	11 953	12 453	12 953	−19.3	33.3	100
South and Southeast Asia	15	94	80 941	70 500	66 446	65 816	66 964	66 622	−1 044	−312	80.6
Western and Central Asia	18	88	2 754	2 744	2 731	2 723	2 702	2 676	−1.06	−1.37	−4.68
Asia	**34**	**88**	**95 342**	**84 697**	**80 630**	**80 492**	**82 119**	**82 251**	**−1 064**	**−280**	**176**
Europe, with data for the Russian Federation subtracted	36	73	3 123	3 254	3 824	3 852	3 608	3 609	13.1	39.8	−24.3
Europe	**37**	**91**	**303 558**	**305 463**	**307 808**	**308 722**	**309 366**	**310 254**	**191**	**217**	**153**
Caribbean	19	95	656	609	560	536	511	487	−4.69	−4.85	−4.86
Central America	1	6	1 442	1 390	1 344	1 301	1 243	1 197	−5.12	−5.96	−10.4
North America	4	58	263 805	258 742	243 326	236 478	233 651	233 362	−506	−1 484	−312
North and Central America	**24**	**57**	**265 903**	**260 741**	**245 229**	**238 314**	**235 405**	**235 045**	**−516**	**−1 495**	**−327**
Oceania	**19**	**99**	**39 105**	**38 935**	**38 833**	**38 551**	**38 462**	**38 349**	**−17.0**	**−25.6**	**−20.2**
South America	**8**	**72**	**342 405**	**329 180**	**313 097**	**309 034**	**303 349**	**298 609**	**−1 322**	**−1 343**	**−1 042**
WORLD	**162**	**77**	**1 237 667**	**1 202 864**	**1 160 368**	**1 144 032**	**1 134 837**	**1 127 945**	**−3 480**	**−3 922**	**−1 609**

The area of primary forest decreased in Oceania by 17 000 ha per year in 1990–2000, 25 600 ha per year in 2000–2015 and 20 200 ha per year in 2015–2025. The higher rate of net loss in 2000–2015 was due mainly to New Zealand, which reported an increase in primary-forest net loss from 230 ha per year in 1990–2000 to 8 950 ha per year in 2000–2015. The region's higher rate of net loss in 2015–2025 compared with 1990–2000 can mostly be attributed to Papua New Guinea, where the rate almost doubled, from 6 700 ha per year in 1990–2000 and 2000–2015 to 12 800 ha per year in 2015–2025.

The area of primary forest decreased in Asia by 1.06 million ha per year in 1990–2000 and 280 000 ha per year in 2000–2015; in contrast, primary-forest area increased in the region in 2015–2025, by 176 000 ha per year. The shift from substantial losses in 1990–2015 to gains in the most recent decade was due mainly to data reported by China and Indonesia. Indonesia indicated an annual net gain in primary-forest area of 148 000 ha in 2015–2025, reversing the trend of previous periods, in which primary forests were lost at a rate of 1.03 million ha per year in 1990–2000 and 286 000 ha in 2000–2015. Indonesia reported that various datasets were available to estimate the area of primary forest. Therefore, the increase in primary-forest area in 2015-2025 may reflect differences between those datasets rather than a real increase in primary-forest area. Overall, Indonesia reported a net loss of 13.1 million ha of primary forest between 1990 and 2025 at an average of 374 000 ha per year.

China reported an annual rate of net loss of primary forest of 19 000 ha in 1990–2000 and a net gain of 100 000 ha per year in 2015–2025. According to information provided by China, this increase reflects efforts to intensify ecological protection, which has led to the reclassification of some naturally regenerating forest as primary forest.

The primary-forest area in Europe increased at an average annual rate of 191 000 ha in 1990–2000, 217 000 ha in 2000–2015 and 153 000 ha in 2015–2025. The higher rate of net gain in 2000–2015 was due mainly to Bulgaria, which reported an average annual net increase of 11 000 ha in 1990–2000 and 29 000 ha in 2000–2015, followed by an average annual net decrease of 10 800 ha in 2015–2025. As indicated by Bulgaria, however, primary-forest area was estimated from newly designated protected areas, starting from 2007; these areas were inventoried in 2020 and some forest designated as primary forest was reclassified as natural forest.

The Russian Federation reported that its primary-forest area increased by 177 000 ha per year in each of the analysed periods. Primary forests are not accounted for specifically in the Russian forest inventory system, however, and therefore the area of primary forests was approximately estimated. Given that the estimated increase in primary-forest area between 1990–2025 was about 0.1 percent per year, it can be explained by natural reforestation processes in forests that were clearcut 80–100 years previously, with the next generation of forest having developed naturally into primary forests.

Planted forest

STATUS

FRA 2025 received information on the area of planted forests (including in the subcategories "plantation forest" and "other planted forest") in 2025 from 229 countries and areas representing nearly 100 percent of the world's forest area. The total area of planted forests globally is estimated at 312 million ha, which is 8 percent of the world's forest area.

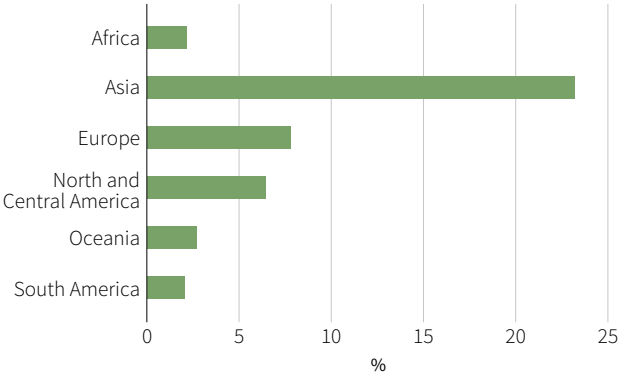
Among the regions, Asia has the largest area of planted forest, at 146 million ha, and the largest share of total forest area held by planted forests (23 percent), followed by Europe, at 80 million ha (8 percent) (Figure 11). If data for the Russian Federation are subtracted, the proportion of total forest area in Europe that is planted forest increases to 29 percent (Table 22).

Table 23 shows the top ten countries and areas for planted forest as a percentage of total forest area. Three of these – the Faroe Islands, Greenland and Kuwait – reported that 100 percent of their forest area is composed of planted forests. Thirty-six countries and areas reported no area of planted forest.

TRENDS

FRA 2025 received information on trends in planted forests between 1990 and 2025 from 224 countries and areas representing more than 99 percent of the world's forest area. The area of planted forests increased globally by 120 million ha over the 35-year period (Table 24). It also

FIGURE 11. Planted forest as a percentage of total forest area, by region, 2025



Box 4. Towards the improved assessment of primary forests

Primary forests are among the planet's most irreplaceable ecosystems, serving as vital reservoirs of biodiversity, storing vast carbon stocks that are crucial for mitigating climate change, and providing essential resources and cultural values for Indigenous Peoples and local communities. Despite their immense value, primary forests are threatened by deforestation, land-use change, illegal logging and other practices.

The area of primary forests, and trends in this parameter over time, are key biodiversity and conservation indicators for the Global Forest Resources Assessment (FRA), linked to several global and regional reporting processes, including the Global Core Set of Forest-related Indicators.[i] The significance of primary forests is also emphasized by several key entities, including the International Union for Conservation of Nature,[ii] the Convention on Biological Diversity (CBD),[*] the Global Environmental Facility,[iii] and the European Union.[†]

There is an urgent need for consistent reporting on the extent of, and trends in, primary forests. Accurately measuring the area of primary forest is challenging, however, because of variations in the ecologies of tropical, temperate and boreal biomes, national approaches and data availability. The biggest obstacle is inconsistencies in the interpretation and application of definitions, raising concerns about the comparability of data reported to FAO and their usefulness for policymaking.

To address these challenges, FAO launched a study in late 2019 to develop guidelines and propose methodologies for improving reporting on primary-forest area and changes in this parameter. The aim is to enhance the consistency, comparability, completeness and quality of data submitted to FRA on primary forests. The study is being conducted with a wide range of partners, including FAO Members, the CBD Secretariat, Griffith University (Australia), the Center for International Forestry Research, the Joint Research Centre of the European Commission , the United Nations Environment Programme World Conservation Monitoring Centre, and Collaborative Forest Resources Questionnaire partners.

As part of the study, scientists at Griffith University prepared a comprehensive background paper that reviewed definitions, data and methods for country-level assessment and reporting on primary forests.[iv] This served as a catalyst for in-depth discussions, first in an online consultation through the FAO Global Forum on Food Security and Nutrition, in which national and international experts contributed valuable insights, and, from 2020 to 2022, through a series of biome- and region-specific expert workshops and pilot studies, in which countries and organizations participated. These discussions helped clarify and refine the concept of primary forest and led to a revision of the explanatory notes for the definition used in FRA 2025. The discussions also highlighted the challenges that countries and areas face in reporting for the FRA on primary-forest area, and experts provided recommendations to harmonize reporting within their respective biomes or regions. The collaborative process led to the development of a practical operational guidance document to improve reporting and data on primary forests in diverse environmental contexts. Additionally, tools based on existing geospatial datasets are being developed and tested to assist countries that lack primary-forest data.

In October 2024, at the 16th Conference of the Parties to the CBD, FAO, the International Union for Conservation of Nature, the United Nations Forum on Forests Secretariat, Griffith University and the Wild Heritage Foundation jointly launched the Global Environment Facility project, "Strengthening conservation of primary forests through partnership enhancement and coordination of support". This initiative is designed to address the urgent need to strengthen the conservation of primary forests globally. As part of the project, FAO will build on its ongoing efforts to enhance data collection and reporting on primary forests, including by identifying practical solutions that help countries and areas monitor primary-forest trends and strengthen national data systems for informed decisions on primary-forest management and conservation. Key activities will also involve developing biome-specific guidelines and geospatial tools to ensure consistent and accurate primary-forest reporting. These sustained efforts are expected to improve knowledge on primary forests worldwide, raise awareness of their importance, and promote more effective management and conservation strategies globally.

Notes: [*] Decision 14/30 of the 14th Conference of the Parties to the CBD highlights the "exceptional importance of primary forest for biodiversity conservation" and "the urgent necessity to avoid major fragmentation, damage to and loss of primary forests of the planet". [†] The European Union Biodiversity Strategy for 2030 targets "the protection of all remaining EU primary and old-growth forests". Primary forests are also mentioned in the 2023 European Union deforestation and forest degradation regulation.

Sources: [i] FAO & CPF. 2022. *An assessment of uptake of the Global Core Set of Forest-related Indicators*. Rome, FAO and CPF (Collaborative Partnership on Forests). https://doi.org/10.4060/cc2223en [ii] IUCN (International Union for Conservation of Nature). 2020. IUCN Policy Statement on Primary Forests including Intact Forest Landscapes. International Union for Conservation of Nature. https://iucn.org/sites/default/files/2022-05/iucn-policy-statement-for-primary-forests.pdf [iii] Global Environment Facility. n.d. *The GEF Strategy on Forests: Preserving forests, for the future of nature and people*. Global Environment Facility. https://www.thegef.org/sites/default/files/documents/2024-05/GEF-StrategyOnForests-final_0.pdf
[iv] Mackey, B., Skinner, E. & Norman, P. 2021. *A review of definitions, data, and methods for country-level assessment and reporting of primary forest*. Griffith Climate Action Beacon Discussion Paper, 1/2021. 35 p. Brisbane, Australia, Griffith University. https://doi.org/10.25904/1912/4510

TABLE 22. Area of planted forest, and planted forest as a proportion of total forest area, by region and subregion, 2025

Region/subregion	Planted-forest area	
	Total (1 000 ha)	% of total forest area
Eastern and Southern Africa	5 621	2
Northern Africa	2 335	6
Western and Central Africa	6 130	2
Africa	**14 085**	**2**
East Asia	106 545	38
South and Southeast Asia	32 802	11
Western and Central Asia	6 778	12
Asia	**146 124**	**23**
Europe, with data for the Russian Federation subtracted	59 341	29
Europe	**80 138**	**8**
Caribbean	943	11
Central America	606	3
North America	48 265	6
North and Central America	**49 814**	**6**
Oceania	**4 923**	**3**
South America	**17 330**	**2**
WORLD	**312 415**	**8**

TABLE 23. Top ten countries and areas for planted forest as a proportion of total forest area, 2025

Ranking	Country	Planted forest as % of total forest area
1	Faroe Islands	100
2	Greenland	100
3	Kuwait	100
4	Bahrain	99
5	Isle of Man	95
6	United Kingdom of Great Britain and Northern Ireland	90
7	Netherlands (Kingdom of the)	88
8	Ireland	86
9	Czechia	84
10	Egypt	83

increased in all regions, at varying rates. The average annual rate of increase globally was highest in 2000–2015, at 4.04 million ha, compared with 3.12 million ha in 1990–2000 and 2.82 million ha in 2015–2025 (Table 25).

The biggest increase in planted-forest area in 2015–2025 was in Asia, where the area grew by about 18 million ha over the period. The region's annual net gain was 1.83 million ha per year in 2015–2025, which was down from 2.0 million ha per year in 2000–2015 but still considerably higher than in 1990–2000, when it was 1.31 million ha per year. The regional trend over the 35-year period was influenced heavily by China, which reported an annual increase in planted-forest area of 1.07 million ha in 1990–2000, 1.61 million ha in 2000–2015 and 1.36 million ha in 2015–2025.

In South and Southeast Asia, the rate of gain increased in each of the three analysed periods (i.e. 1990–2000, 2000–2015 and 2015–2025). In Western and Central Asia, the rate of gain in 2015–2025 was less than half that in 1990–2000.

Of the regions, North and Central America had the second-largest increase in planted-forest area in 2015–2025, although the average annual rate of gain slowed – from 953 000 ha in 1990–2000, to 752 000 ha in 2000–2015, to 586 000 ha in the most recent decade. This slowdown mainly reflects the situation in the United States of America, where the average annual increase in planted-forest area declined from 462 000 ha in 1990–2000 to 106 000 ha in 2015–2025.

The area of planted forests increased in Africa between 1990 and 2025, with an average annual gain of 92 900 ha in 1990–2000, 154 000 ha in 2000–2015 and 190 000 ha in 2015–2025. These increases can mostly be attributed to Western and Central Africa, where Côte d'Ivoire, Ghana and Mali all reported significant increases in the rate of gain of planted forests.

The average annual rate of increase in planted-forest area was substantially lower in Europe in 2015–2025 than in the previous two periods. This was due mainly to the Russian Federation, where the rate decreased from 129 000 ha per year in 1990–2000 and 143 000 ha in 2000–2015 to 34 900 ha per year in 2015–2025.

The average annual rate of increase in planted-forest area trended downward in Oceania, from 100 000 ha in 1990–2000, to 56 700 ha in 2000–2015, to 23 300 ha in 2015–2025. This was due mainly to Australia, where the area of planted forest increased by 46 200 ha per year in 1990–2000 but declined by 22 600 ha per year in 2015–2025.

The average annual rate of increase in planted-forest area slowed significantly in South America in the most recent decade, with changes in the area of plantation forest reported in Brazil (see below). Ecuador reported a net loss in planted-forest area over the most recent decade, and all other countries in South America except the Plurinational State of Bolivia and Paraguay reported decreasing rates of gain in planted-forest area in 2015–2025 compared with 2000–2015.

TABLE 24. Area of planted forest, by region and subregion, 1990–2025

Region/subregion	Area (1 000 ha)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	4 294	4 644	4 996	5 158	5 426	5 621
Northern Africa	1 826	2 013	2 157	2 213	2 283	2 335
Western and Central Africa	2 829	3 221	4 178	4 810	5 593	6 130
Africa	**8 948**	**9 877**	**11 330**	**12 181**	**13 303**	**14 085**
East Asia	57 479	68 499	87 249	92 974	101 973	106 545
South and Southeast Asia	21 838	23 500	26 194	28 268	32 081	32 802
Western and Central Asia	5 373	5 803	6 294	6 580	6 581	6 778
Asia	**84 690**	**97 802**	**119 737**	**127 822**	**140 635**	**146 124**
Europe, with data for the Russian Federation subtracted	40 267	43 653	47 270	49 062	50 156	50 487
Europe	**57 286**	**61 959**	**67 514**	**69 511**	**70 779**	**71 285**
Caribbean	467	478	710	878	916	943
Central America	58.4	183	305	347	439	606
North America	22 616	32 013	39 789	42 731	46 022	48 265
North and Central America	**23 141**	**32 674**	**40 804**	**43 956**	**47 377**	**49 814**
Oceania	**2 841**	**3 839**	**4 707**	**4 690**	**4 616**	**4 923**
South America	**6 645**	**8 648**	**13 911**	**17 174**	**17 220**	**17 330**
WORLD	**183 551**	**214 799**	**258 003**	**275 333**	**293 929**	**303 561**

TABLE 25. Annual change in the area of planted forest, by region and subregion, 1990–2025

Region/subregion	1990–2000		2000–2015		2015–2025	
	1 000 ha/year	%	1 000 ha/year	%	1 000 ha/year	%
Eastern and Southern Africa	35.0	0.79	34.3	0.70	46.3	0.86
Northern Africa	18.7	0.98	13.3	0.63	12.2	0.54
Western and Central Africa	39.2	1.31	106	2.71	132	2.45
Africa	**92.9**	**0.99**	**154**	**1.41**	**190**	**1.46**
East Asia	1 102	1.77	1 632	2.06	1 357	1.37
South and Southeast Asia	166	0.74	318	1.24	453	1.50
Western and Central Asia	43.1	0.77	51.8	0.84	19.8	0.30
Asia	**1 311**	**1.45**	**2 001**	**1.80**	**1 830**	**1.35**
Europe, with data for the Russian Federation subtracted	339	0.81	361	0.78	143	0.29
Europe	**467**	**0.79**	**503**	**0.77**	**177**	**0.25**
Caribbean	1.12	0.24	26.7	4.14	6.42	0.71
Central America	12.5	12.12	10.9	4.34	25.9	5.74
North America	940	3.54	715	1.94	553	1.23
North and Central America	**953**	**3.51**	**752**	**2.00**	**586**	**1.26**
Oceania	**100**	**3.06**	**56.7**	**1.34**	**23.3**	**0.49**
South America	**200**	**2.67**	**568**	**4.68**	**15.6**	**0.09**
WORLD	**3 125**	**1.58**	**4 036**	**1.67**	**2 823**	**0.98**

Plantation forests and other planted forests

STATUS

This analysis of the status of plantation forests and other planted forests[9] in 2025 is based on data reported by 229 countries and areas representing nearly 100 percent of the global forest area.

Worldwide, there are 158 million ha of plantation forests, which is just over half the total area of planted forests and almost 4 percent of the total forest area. The remainder comprises "other" planted forests, which cover 155 million ha.

The largest share of plantation forests is in South America, where this subcategory constitutes almost 100 percent of the total planted-forest area; plantation forests also account for most of the total planted-forest area in Oceania (92 percent), Africa (83 percent) and Asia (71 percent) (Table 26; Figure 12). Table 27 shows the top ten countries and areas for plantation forests as a proportion of total forest area, headed by the Faroe Islands and Greenland, for which the proportion is 100 percent.

Other planted forests comprise 94 percent of the total planted-forest area in Europe and 69 percent in North and Central America.

TABLE 26. Area of plantation forest and other planted forest, by region and subregion, 2025

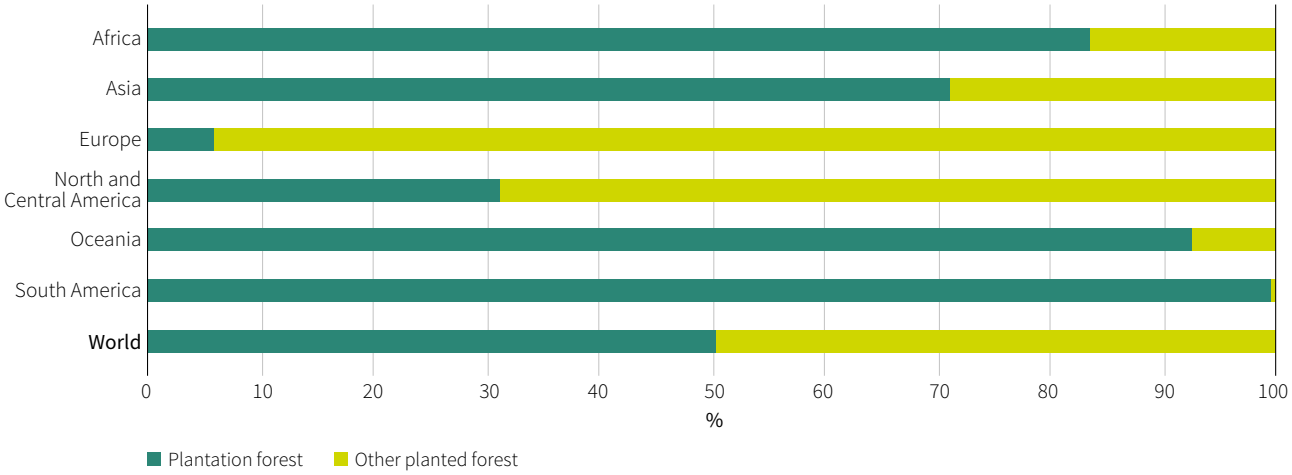
Region/subregion	Plantation forest	Other planted forest	Total planted forest
		1 000 ha	
Eastern and Southern Africa	5 049	572	5 621
Northern Africa	1 409	926	2 335
Western and Central Africa	5 301	829	6 130
Africa	**11 759**	**2 327**	**14 085**
East Asia	71 457	35 088	106 545
South and Southeast Asia	28 429	4 372	32 802
Western and Central Asia	4 023	2 755	6 778
Asia	**103 909**	**42 215**	**146 124**
Europe	**4 587**	**75 552**	**80 138**
Caribbean	459	483	943
Central America	472	134	606
North America	14 501	33 764	48 265
North and Central America	**15 433**	**34 381**	**49 814**
Oceania	**4 553**	**369**	**4 923**
South America	**17 269**	**61.2**	**17 330**
WORLD	**157 510**	**154 905**	**312 415**

[9] As indicated in Figure 10, **plantation forests** are planted forests that are managed intensively and meet all the following criteria at planting and stand maturity: one or two species; even age class; and regular spacing. **Other planted forests** are planted forests that do not meet the criteria of a plantation forest and may even resemble natural forests at stand maturity.

TRENDS

FRA 2025 received information on trends in plantation forests and other planted forests in 1990–2025 from 224 countries and areas representing more than 99 percent of the world's forest area.

FIGURE 12. Plantation forest and other planted forest as a proportion of planted forest area, by region and globally, 2025



The area of plantation forests worldwide increased by 71.3 million ha over the period, with the highest annual rate of increase recorded between 2000 and 2015 (Table 28). The average annual rate of gain increased from 1.67 million ha in 1990–2000 to 2.53 million ha in 2000–2015, before returning to 1.67 million ha per year in the most recent decade.

TABLE 27. Top ten countries and areas for plantation forest as a proportion of total forest area, 2025

Ranking	Country	Area of plantation forest	
		Total (1 000 ha)	% of total forest area
1	Greenland	0.22	100
2	Faroe Islands	0.08	100
3	Ireland	716	86
4	Isle of Man	2.84	77
5	Rwanda	397	63
6	Uruguay	1 167	58
7	Mauritius	18.0	47
8	Belgium	287	43
9	Burundi	113	40
10	Palau	16.8	40

The area of other planted forest increased by 48.7 million ha between 1990 and 2025. Globally, the average annual rate of gain was 1.46 million ha in 1990–2000, 1.51 million ha in 2000–2015 and 1.15 million ha in 2015–2025. The rate of gain in the area of other planted forests declined in 2015–2025 in all regions except North and Central America and South America (Table 29). Figure 13 shows the proportion of the total planted-forest area held by plantation forest and other planted forest. The area of other planted forest increased by more than 400 000 ha per year in 2015–2025 in Asia (471 000 ha) and North and Central America (439 000 ha). The rate of expansion of other planted forests was lower in Europe in the most recent decade – at 187 000 ha per year – than in 2000–2015, when it was 491 000 ha per year.

The area of plantation forest increased over the three analysed periods (i.e. 1990–2000, 2000–2015 and 2015–2025) in all regions except Europe, where there was a decline in the most recent decade. The area of other planted forest increased in all regions over the three periods.

The increase in plantation-forest area in the last 35 years has been dominated by Asia, which reported an average annual rate of gain of 992 000 ha in 1990–2000, 1.50 million ha in 2000–2015 and 1.36 million ha in 2015–2025. The large increase in 2000–2015 was due largely to the implementation of large-scale afforestation programmes in China.

TABLE 28. Annual change in the area of plantation forest, by region and subregion, 1990–2025

Region/subregion	1990–2000		2000–2015		2015–2025	
	1 000 ha/year	%	1 000 ha/year	%	1 000 ha/year	%
Eastern and Southern Africa	19.6	0.45	18.9	0.41	30.8	0.63
Northern Africa	5.81	0.44	1.78	0.13	2.41	0.17
Western and Central Africa	38.1	1.34	77.2	2.16	108	2.31
Africa	**63.3**	**0.75**	**97.8**	**1.02**	**141**	**1.29**
East Asia	765	1.85	1 114	2.10	910	1.37
South and Southeast Asia	190	1.06	330	1.55	448	1.73
Western and Central Asia	36.9	1.22	52.0	1.45	1.66	0.04
Asia	**992**	**1.59**	**1 495**	**1.92**	**1 359**	**1.41**
Europe	**37.8**	**0.99**	**12.6**	**0.31**	**−9.51**	**−0.23**
Caribbean	0.44	0.20	12.5	4.12	4.60	1.06
Central America	12.1	12.71	9.17	3.97	16.2	4.27
North America	263	3.62	298	2.78	126	0.91
North and Central America	**275**	**3.63**	**319**	**2.84**	**147**	**1.00**
Oceania	**100**	**3.09**	**36.1**	**0.89**	**20.2**	**0.46**
South America	**199**	**2.66**	**568**	**4.68**	**13.0**	**0.08**
WORLD	**1 668**	**1.79**	**2 529**	**2.12**	**1 671**	**1.13**

The average annual rate of growth in plantation-forest area increased in Africa in each of the three analysed periods, from 63 300 ha in 1990–2000, to 97 800 ha in 2000–2015, to 141 000 ha in 2015–2025. The proportion of the planted-forest area held by plantation forest in the region decreased from 92 percent in 1990 to 83 percent in 2025.

In Oceania, the area of plantation forest grew by 100 000 ha per year in 1990–2000, 36 100 ha per year in 2000–2015 and 20 200 ha per year in 2015–2025. The share of the total planted-forest area held by other planted forest increased from 1 percent in 1990 to 8 percent in 2025.

The rate of increase in plantation-forest area in South America was significantly lower in 2015–2025 (13 000 ha per year) than in 1990–2000 (199 000 ha per year) and 2000–2015 (568 000 ha per year). Brazil reported a net loss of 72 400 ha of planted-forest area in 2015–2025, compared with an overall gain of 419 000 ha per year in 2000–2015.

The area of plantation forest in Europe decreased by an average annual rate of 9 500 ha in 2015–2025, reversing the previous increasing trend.

Plantations of introduced species

STATUS

Of the 229 countries and areas that reported on the area of plantation forests in 2025, 210 – representing 94 percent of the world's forest area – reported on the area of plantation forest composed of introduced species. Of those, 20 indicated that they have no introduced species and that all their plantation forests are composed of native species.

Globally, the area of plantation forest composed of introduced species is 65.2 million ha, which is 1.7 percent of the total forest area of the reporting countries and areas and 44 percent of their total area of plantation forest (Table 30).

Asia has the largest area of plantation forest composed of introduced species, at 35.4 million ha (36 percent of the total area of plantation forest in that region), followed by South America, at 16.1 million ha; South America is also the region with the highest proportion (95 percent) of plantation forests composed of introduced species. Thirty-eight countries reported that 100 percent of their plantation-forest area is composed of introduced species; 12 of these are in Eastern and Southern Africa, which is the subregion with the highest share (97 percent of the total plantation-forest area) of plantation forests composed of introduced species. *Eucalyptus* and *Pinus* are the most commonly planted introduced species in Eastern and Southern Africa, accounting for 45 and 38 percent, respectively, of the total area of introduced species.

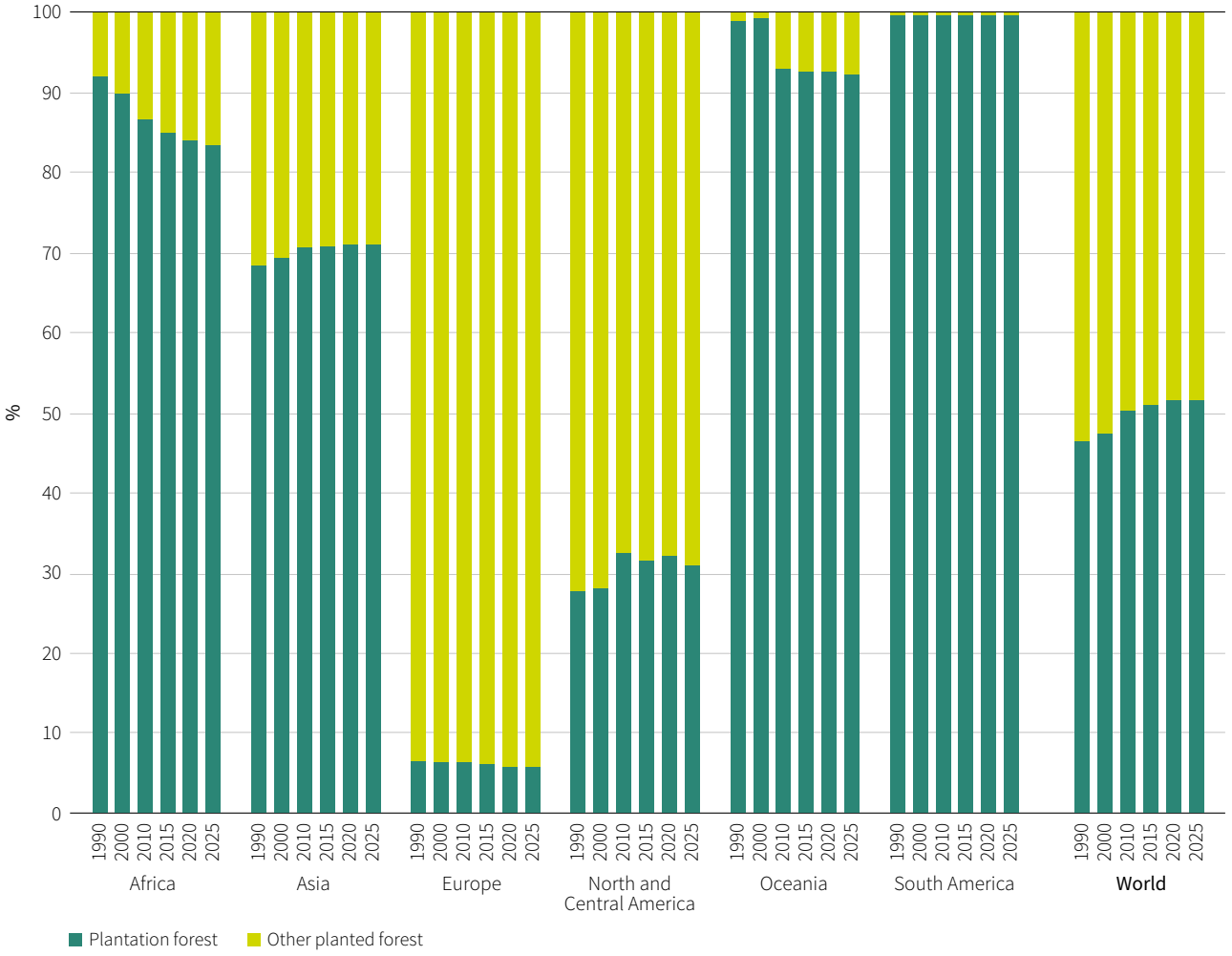
TRENDS

Information on trends in the area of plantation forest composed of introduced species was available for

TABLE 29. Annual change in the area of other planted forest, by region and subregion, 1990–2025

Region/subregion	1990–2000		2000–2015		2015–2025	
	1 000 ha/year	%	1 000 ha/year	%	1 000 ha/year	%
Eastern and Southern Africa	15.4	19.48	15.4	5.55	15.5	3.22
Northern Africa	12.9	2.21	11.6	1.58	9.83	1.13
Western and Central Africa	1.05	0.68	28.8	9.11	23.7	3.42
Africa	**29.3**	**3.53**	**55.8**	**4.14**	**49.0**	**2.39**
East Asia	337	1.61	518	1.97	447	1.37
South and Southeast Asia	–23.6	–0.51	–11.9	–0.27	5.53	0.13
Western and Central Asia	6.17	0.24	–0.16	–0.01	18.1	0.68
Asia	**320**	**1.14**	**506**	**1.52**	**471**	**1.19**
Europe	**430**	**0.77**	**491**	**0.80**	**187**	**0.28**
Caribbean	0.69	0.28	14.2	4.15	1.83	0.39
Central America	0.40	5.24	1.73	8.91	9.78	14.03
North America	677	3.50	417	1.60	427	1.36
North and Central America	**678**	**3.46**	**433**	**1.64**	**439**	**1.38**
Oceania	**0.01**	**0.02**	**20.6**	**17.61**	**3.06**	**0.87**
South America	**0.80**	**4.40**	**0.08**	**2.86**	**2.64**	**5.79**
WORLD	**1 457**	**1.40**	**1 507**	**1.23**	**1 152**	**0.82**

FIGURE 13. Plantation forest and other planted forest as a proportion of total planted-forest area, by region and globally, 1990–2025



202 countries and areas, representing 92 percent of the world's forest area (Table 31).

The area of plantation forest worldwide composed of introduced species increased by 34.0 million ha between 1990 and 2025, and the proportion of the total plantation-forest area comprising introduced species increased from 37 percent in 1990 to 44 percent in 2025. Growth in the share of plantation forests composed of introduced species was particularly evident in East Asia, where the share grew from 13 percent in 1990 to 30 percent in 2025. In Africa, the share of plantation forests of introduced species was mostly stable over the period.

Mangroves

Mangroves are salt-tolerant evergreen tree and shrub formations that grow in intertidal regions of tropical, subtropical and some temperate sheltered coastlines, shallow-water lagoons, estuaries, rivers and deltas. Mangrove ecosystems perform many important socioeconomic and environmental functions. For example, they produce diverse wood and non-wood forest products, help protect coastal areas and coral reefs, have important roles in the life-cycles of many marine species, and conserve biodiversity. Mangroves are among the world's most productive ecosystems and are important carbon sinks; they make crucial contributions to many of the Sustainable Development Goals.

TABLE 30. Area of plantation forests composed of introduced species, by region and subregion, 2025

Region/subregion	Data availability		Plantation-forest area		
	No. of reporting countries/areas	% of total forest area	Total (1 000 ha)	… of which composed of introduced species	% introduced
Eastern and Southern Africa	21	90	3 566	3 461	97
Northern Africa	9	100	1 409	458	33
Western and Central Africa	24	94	2 445	2 261	92
Africa	**54**	**93**	**7 420**	**6 179**	**83**
East Asia	4	97	69 860	20 930	30
South and Southeast Asia	16	84	25 755	14 088	55
Western and Central Asia	24	96	3 873	388	10
Asia	**44**	**91**	**99 489**	**35 406**	**36**
Europe	**44**	**98**	**4 214**	**3 008**	**71**
Caribbean	27	100	459	267	58
Central America	4	58	388	56.7	15
North America	5	100	14 501	367	3
North and Central America	**36**	**99**	**15 349**	**691**	**5**
Oceania	**20**	**99**	**4 535**	**3 749**	**83**
South America	**12**	**86**	**17 008**	**16 118**	**95**
WORLD	**210**	**94**	**148 015**	**65 151**	**44**

TABLE 31. Area of plantation forests composed of introduced species as a proportion of total plantation-forest area, by region and subregion, 1990–2025

Region/subregion	Data availability		% of plantation forest area composed of introduced species					
	No. of reporting countries/areas	% of total forest area	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	21	90	95	95	96	96	97	97
Northern Africa	9	100	36	35	34	54	33	33
Western and Central Africa	24	94	94	93	93	93	93	92
Africa	**54**	**93**	**83**	**82**	**82**	**86**	**83**	**83**
East Asia	4	97	13	19	25	27	30	30
South and Southeast Asia	15	83	52	51	53	55	56	55
Western and Central Asia	24	96	13	11	10	10	11	10
Asia	**43**	**91**	**25**	**27**	**31**	**34**	**36**	**36**
Europe	**39**	**96**	**66**	**67**	**70**	**74**	**73**	**72**
Caribbean	27	100	52	54	52	57	59	58
Central America	3	45	26	18	11	7	4	6
North America	5	100	5	4	3	3	3	3
North and Central America	**35**	**98**	**7**	**6**	**5**	**4**	**4**	**4**
Oceania	**20**	**99**	**94**	**94**	**76**	**77**	**81**	**83**
South America	**11**	**79**	**96**	**96**	**95**	**95**	**96**	**95**
WORLD	**202**	**92**	**37**	**39**	**41**	**44**	**44**	**44**

STATUS

FRA 2025 received information on mangroves for 2025 from 226 countries and areas, of which 116 indicated that they have areas of mangrove forest (the remaining 110 reported that they have no mangroves). Globally, the area of mangroves is estimated at 15.9 million ha (Table 32). Asia has the largest area, at 6.10 million ha, and Europe reported no mangrove area. Among countries and areas, Indonesia has the world's largest extent of mangroves, at 3.40 million ha, followed by Brazil (1.39 million ha), Australia (1.11 million ha), Nigeria (976 000 ha) and Mexico (947 000 ha). Collectively, these five countries host almost half (49 percent) of the global mangrove area.

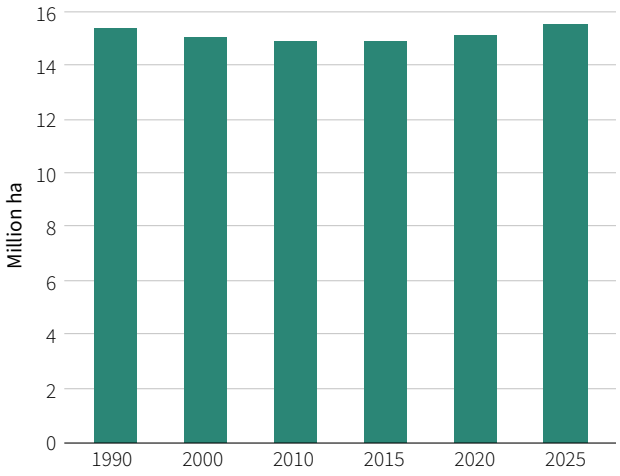
TRENDS

FRA 2025 received information on trends in mangrove area from 219 countries and areas.[10]

Globally, the area of mangroves increased by 197 000 ha between 1990 and 2025 (Table 33; Figure 14), with increases in all regions except Africa. FAO's report on the world's mangroves covering the period 2000–2020 (FAO, 2023d) found that restoration and natural expansion accounted for the increase in mangrove area, with the relative importance of these varying between regions. The area of mangroves declined between 1990 and 2015 at an average annual rate of 29 300 ha in 1990–2000 and 11 300 ha in 2000–2015. The area increased in the most recent decade, however, at an average of 65 900 ha per year.

[10] Note that changes in assessment methodologies in several countries and areas mean that estimates of mangrove area for the various assessment years may not be directly comparable. These results, therefore, should be viewed with caution.

FIGURE 14. Total area of mangroves, 1990–2025



Among the regions, the highest increase in 2015–2025 was in Asia, at 44 100 ha per year, due mainly to increases reported by Indonesia. There were reported increases in mangrove area in North and Central America and Oceania in the most recent decade and decreases in Africa and South America. Nevertheless, the decline in mangrove area in Africa lessened significantly, from 6 420 ha per year in 1990–2000 to 2 770 ha per year in 2015–2025.

The area of mangroves in South America increased by 7 590 ha per year in 2000–2015. This was mainly because of Guyana, which reported an average annual increase in mangrove area of 13 000 ha over the period, due partly to a mangrove restoration project and partly to improvements in mapping (and therefore the increase does not necessarily reflect actual changes in mangrove area).

Bamboo

Bamboo is widely distributed in the tropical, subtropical and temperate climatic domains. It produces diverse important non-wood forest products with many traditional uses, as well as industrial materials for construction and furniture, in either its natural form or a reconstituted form (e.g. laminated boards and panels). Bamboo shoots are an increasingly mainstream food.

TABLE 32. **Area of mangroves, by region and subregion, 2025**

Region/subregion	Mangrove area	
	Total (1 000 ha)	% of global total
Eastern and Southern Africa	924	6
Northern Africa	32.2	n.s.
Western and Central Africa	2 324	15
Africa	**3 280**	**21**
East Asia	27.5	n.s.
South and Southeast Asia	6 023	38
Western and Central Asia	50.8	n.s.
Asia	**6 102**	**38**
Europe	**0**	**0**
Caribbean	690	4
Central America	521	3
North America	1 213	8
North and Central America	**2 424**	**15**
Oceania	**1 541**	**10**
South America	**2 514**	**16**
WORLD	**15 861**	**100**

Note: n.s. = not significant.

TABLE 33. Area of mangroves and annual change, by region and subregion, 1990–2025

Region/subregion	Area (1 000 ha)						Annual change (1 000 ha/year)		
	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	927	908	898	930	927	924	−1.92	1.47	−0.67
Northern Africa	35.0	32.0	33.2	37.2	32.2	32.2	−0.30	0.34	−0.50
Western and Central Africa	2 344	2 302	2 309	2 340	2 295	2 324	−4.20	2.52	−1.60
Africa	**3 307**	**3 243**	**3 240**	**3 308**	**3 254**	**3 280**	**−6.42**	**4.34**	**−2.77**
East Asia	20.4	22.2	24.3	25.4	26.5	28.5	0.18	0.21	0.22
South and Southeast Asia	5 959	6 033	5 770	5 588	5 610	6 023	7.41	−29.7	43.6
Western and Central Asia	48.6	48.8	52.3	47.5	49.2	51.8	0.02	0.02	0.34
Asia	**6 027**	**6 103**	**5 846**	**5 661**	**5 686**	**6 102**	**7.61**	**−29.5**	**44.1**
Europe	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Caribbean	688	688	689	688	685	686	−0.04	0.05	−0.24
Central America	462	457	465	457	469	479	−0.51	0.03	2.24
North America	1 167	1 176	1 195	1 195	1 200	1 213	0.87	1.27	1.81
North and Central America	**2 318**	**2 321**	**2 350**	**2 340**	**2 354**	**2 378**	**0.32**	**1.29**	**3.80**
Oceania	**1 476**	**1 208**	**1 338**	**1 284**	**1 541**	**1 541**	**−26.7**	**5.02**	**25.7**
South America	**2 209**	**2 168**	**2 088**	**2 282**	**2 256**	**2 232**	**−4.05**	**7.59**	**−4.99**
WORLD	**15 336**	**15 043**	**14 862**	**14 874**	**15 091**	**15 533**	**−29.3**	**−11.3**	**65.9**

TABLE 34. Area of bamboo forest, by region and subregion, 2025

Region/subregion	Area (1 000 ha)
Eastern and Southern Africa	1 787
Northern Africa	30.0
Western and Central Africa	1 815
Africa	**3 632**
East Asia	8 721
South and Southeast Asia	12 434
Western and Central Asia	n.s.
Asia	**21 156**
Europe	**0**
Caribbean	146
Central America	0
North America	0
North and Central America	**146**
Oceania	**1.00**
South America	**5 211**
WORLD	**30 146**

Note: n.s. = not significant.

STATUS AND TRENDS

Of the 158 countries that reported on bamboo for FRA 2025, 33 indicated that they had bamboo forests. The total bamboo resource in these countries is estimated at 30.1 million ha, of which 21.2 million ha (70 percent) is in Asia, with India and China accounting for 11.8 million ha and 8.53 million ha, respectively (Table 34). The global area of bamboo forest increased by 8.05 million ha between 1990 and 2025, largely because of increases in China and India; the total area has declined since 2015, however (Figure 15).

Rubber plantations

Rubber plantations are important in some regions, especially Asia. Although their main purpose is latex production, they are included in FRA 2025 because rubberwood is an important timber product. Some countries categorize rubber plantations as agricultural tree crops, however, and do not include them in their forest statistics.

STATUS AND TRENDS

Twenty of the 192 countries and areas that reported on this variable for FRA 2025 indicated that they have areas of rubber plantation. Several important rubber-producing countries did not report on their rubber plantation resources, however, and are missing from the totals

FIGURE 15. Total area of bamboo forest, 1990–2025

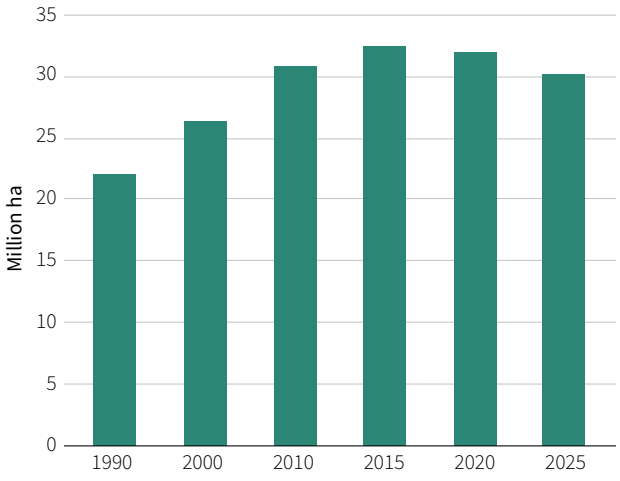


FIGURE 16. Total area of rubber plantations, 1990–2025

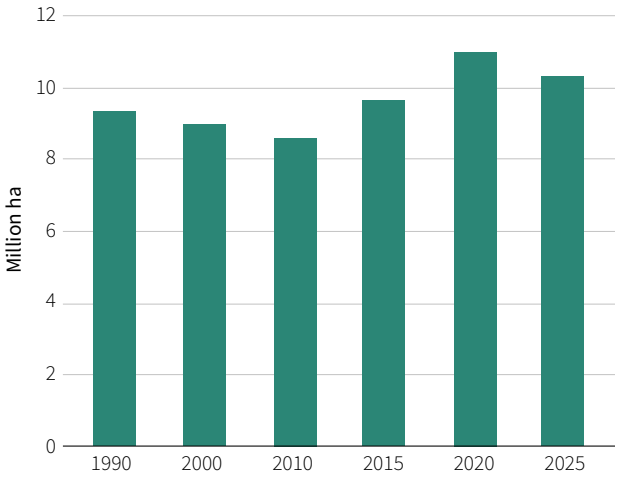


TABLE 35. Area of rubber plantations, by reporting country, 2025

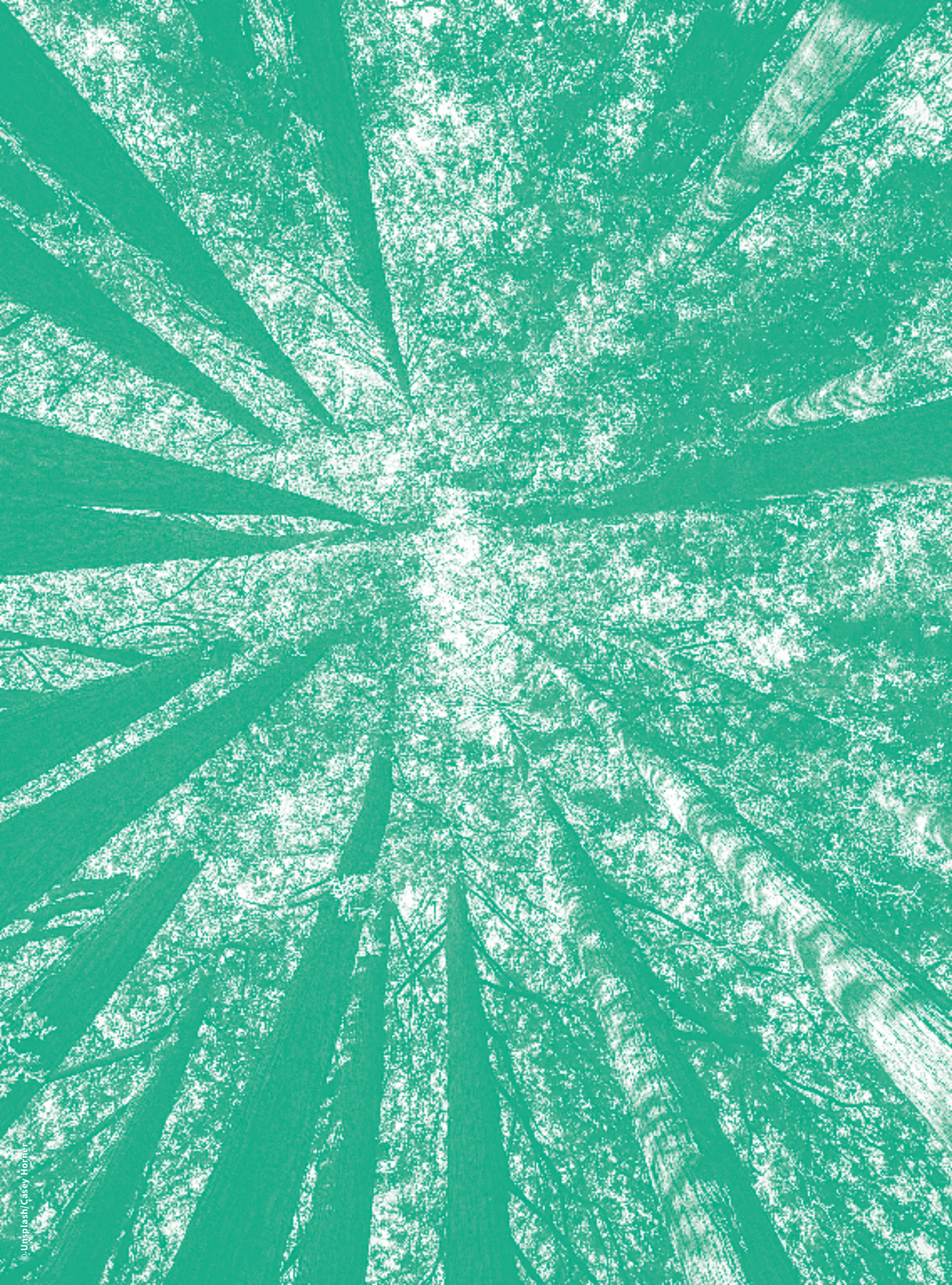
Ranking	Country	Area (1 000 ha)
1	Thailand	3 314
2	Malaysia	2 181
3	China	1 554
4	Viet Nam	980
5	India	831
6	Côte d'Ivoire	787
7	Cambodia	514
8	Liberia	200
9	Guatemala	163
10	Sri Lanka	138
11	Cameroon	60.0
12	Colombia	31.4
13	Mexico	29.1
14	Bangladesh	23.7
15	Democratic Republic of the Congo	15.6
16	Gabon	12.2
17	Papua New Guinea	11.7
18	Guinea	6.24
19	Zambia	4.49
20	Nepal	1.00
	Total	**10 857**

reported here, which therefore are likely to underestimate the global rubber-plantation resource.

The total area of rubber plantations in the 20 reporting countries is estimated at 10.9 million ha, mainly in South and Southeast Asia, where the area accounts for more than three-quarters of the world total (Table 35). Thailand has the largest area of rubber plantations among the reporting countries, at 3.31 million ha. The total area of rubber plantations increased by an estimated 992 000 ha between 1990 and 2025 (Figure 16).

4

Growing stock, biomass and carbon



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Information on forest growing stock, biomass and carbon is essential for understanding the dynamics and productive capacity of forests and quantifying their contributions to ecosystem services and climate-change adaptation and mitigation. Growing stock – the volume of living trees in a forest – and its trends are key indicators for understanding a forest's capacity to support woody vegetation and the extent to which that capacity is in use. Typically, estimates of forest growing stock are obtained using data from direct measurements of tree diameter, height and other characteristics complemented by species identification. Models that integrate remote sensing and ground-based data have also increasingly been applied to provide spatially explicit maps of forest growing stock.

Global forest growing stock has been assessed in all previous FRAs. For FRA 2025, countries and areas provided data on total growing stock and growing stock per ha, disaggregated by the following categories: naturally regenerating forest; primary forest (a subcategory of naturally regenerating forest); and planted forest and its subcategories – plantation forest, plantation forest composed of introduced species (a subset of plantation forest), and other planted forest.

FRA 2025 also collected information on the species composition of growing stock: countries were invited to report on the growing stock of the ten most common native and five most common introduced tree species, as well as the share of total growing stock held by native and introduced species. Information on species composition and the diversity of tree species is essential for sustainable forest management (SFM), the development of new tree-based products, biodiversity conservation and use, and the mitigation of, and adaption to, climate change.

Biomass and carbon stock are indicators of a forest's capacity to sequester and store carbon. Collectively, forests constitute the largest terrestrial carbon sink, and they play a central role in the global carbon cycle. Accurate information on the status of, and trends in, the five forest carbon pools – that is, aboveground biomass, belowground biomass, deadwood, litter and soil – is essential for understanding the role of forests in the global carbon cycle and for the implementation of effective climate-change mitigation and adaptation strategies.

FRA 2025 adheres to the Intergovernmental Panel on Climate Change (IPCC)'s guidelines for national greenhouse-gas inventories, using its definitions for each of the carbon pools (IPCC, 2006, 2019). Countries and areas are also encouraged to follow these guidelines. Discrepancies exist, however, between the data reported to the FRA and those submitted to the UNFCCC, largely because of differences in forest definitions; the forests included in reporting (the UNFCCC requests countries to report on "managed forests" only, which may not comprise the entire forest resource); and differences in the methods used for calibration, reclassification, estimation and forecasting.

Compared with FRA 2020 (FAO, 2020), there is a notable increase in FRA 2025 in reporting coverage for growing stock, biomass and carbon through national forest inventories, both in the number of reporting countries and areas and the forest area covered. Enhanced metadata provision on the FRA Platform also facilitated more in-depth analysis of underlying data sources. Historical data are sparse, however, because few countries and areas have multiple comparable national forest inventory datasets spanning the FRA reporting years. Therefore, for some countries and areas, changes in average growing stock per ha have been inferred from changes in the relative area of different forest types (as described above) rather than from direct forest remeasurement. Although overall data coverage has improved, information on growing-stock composition – especially the proportion of native and introduced tree species – is still limited at the global level (only 95 countries and areas fully reported). Moreover, default IPCC conversion factors rather than country-specific models were applied in many cases to derive biomass and carbon estimates from growing stock. Estimates of carbon in deadwood, litter and soil are particularly weak in Africa and Asia, with many countries and areas unable to report on these carbon pools. Given the importance of growing-stock

TABLE 36. Volume of forest growing stock, by region and subregion, 2025

Region/subregion	Total growing stock (million m^3)	% of total growing stock	Growing stock per unit area (m^3/ha)
Eastern and Southern Africa	19 119	3	64.6
Northern Africa	1 444	n.s.	37.0
Western and Central Africa	64 569	10	197
Africa	**85 132**	**14**	**128**
East Asia	29 736	5	106
South and Southeast Asia	38 216	6	130
Western and Central Asia	4 162	1	74.0
Asia	**72 115**	**11**	**114**
Europe , with data for the Russian Federation subtracted	35 863	6	174
Europe	**161 540**	**26**	**155**
Caribbean	722	n.s.	86.0
Central America	4 229	1	178
North America	99 900	16	134
North and Central America	**104 850**	**17**	**135**
Oceania	**22 148**	**4**	**120**
South America	**184 157**	**29**	**217**
WORLD	**629 941**	**100**	**152**

Note: n.s. = not significant.

composition and soil organic carbon, support for countries to improve those estimates is a pressing need for future assessments.

Several countries with large forest areas revised their estimates of growing stock, biomass and forest area, particularly by incorporating new national forest inventory data (as described above). These revisions have had significant impacts on global estimates, resulting in higher values for growing stock, biomass and carbon compared with FRA 2020. Notably, the Russian Federation substantially updated its values for growing stock and forest area; the United States of America revised its estimates of biomass and carbon; and Canada updated its forest-area estimates – all three countries drew on new national forest inventory data for their revisions. In addition, some African countries, including the Democratic Republic of the Congo and the Central African Republic, revised their forest-area estimates to include open forests, leading to higher estimates of growing stock and biomass in those countries.

Growing stock

STATUS

FRA 2025 received information on growing stock in 2025 from 216 countries and areas representing 97 percent of the global forest area. For countries and areas that did not provide information on growing stock, estimates were made by either applying subregional averages of growing stock per ha to total forest area or using data from neighbouring countries and areas with similar ecological conditions.

The global forest growing stock is estimated at 630 billion m^3, with the largest share in South America (29 percent), followed by Europe (26 percent) (Table 36; Figure 17). Globally, the average growing stock per unit area is estimated at 152 m^3 per ha, with the highest values in tropical regions, led by South America (217 m^3 per ha), Western and Central Africa (197 m^3 per ha) and Central America (178 m^3 per ha). Of the regions in which temperate and boreal forests predominate, the highest growing stock per unit area is in Europe (data for the Russian Federation subtracted), at 174 m^3 per ha.

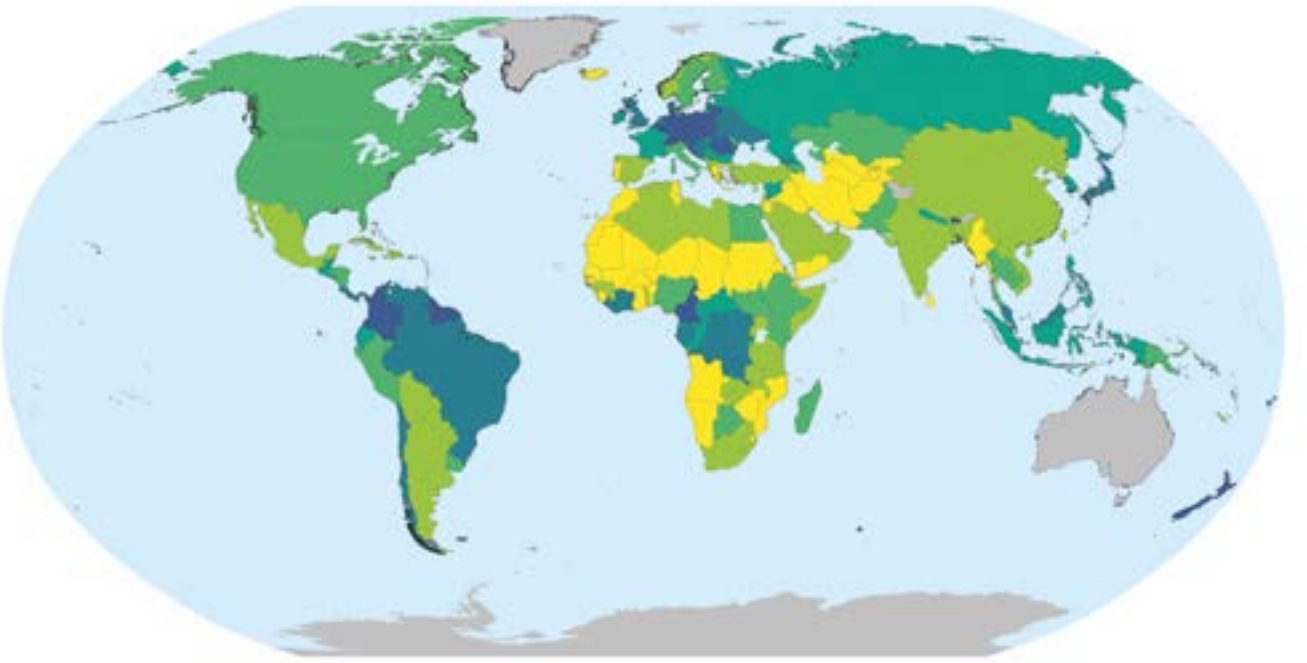
Almost 40 percent of the global growing stock is in two countries – the Russian Federation (126 billion m^3, or nearly 20 percent of the global total) and Brazil (118 billion m^3). Other countries with 5 percent or more of the global growing stock are (in descending order, by volume) Canada, the United States of America and the Democratic Republic of the Congo (Table 37).

GROWING STOCK BY FOREST CATEGORY

FRA 2025 received data on the distribution of growing stock in the two main forest categories (naturally regenerating forest and planted forest) from 177 countries and areas representing 83 percent of the world's forest area and 91 percent of the total forest growing stock. For countries and areas that did not provide this information, estimates were made by applying forest growing stock per unit area to the total area of naturally regenerating forest and total area of planted forest. In combination, these methods enabled the inclusion in the analysis of 229 countries and areas representing nearly 100 percent of the total forest area and growing stock.

Globally, 93 percent of the total growing stock in 2025 is in naturally regenerating forest, and planted forests account for 7 percent. At the global level, the average growing stock per unit area is higher in naturally regenerating forest (153 m^3 per ha) than in planted forest (139 m^3 per ha) (Table 38). This is due partly to the global increase in planted forests in the last few decades, with younger planted forests not yet reaching peak growing-stock volume, and partly to the higher frequency of harvesting in planted forests. Of the regions, Asia reported the highest proportion of growing stock in planted forests (19 percent),

FIGURE 17. Forest growing stock per unit area, by country and area, 2025



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

driven by East Asia. Africa and South America reported the lowest proportions (Figure 18 and Figure 19).

PRIMARY-FOREST GROWING STOCK

Primary forests support an estimated one-third (33 percent) of the total forest growing stock, at 206 billion m³ (Table 39). Of the regions, South America has the largest proportion of the world's primary-forest growing stock (11 percent), followed by Europe (7 percent). The volume of primary-forest growing stock as a percentage of total growing stock is highest in South America (39 percent), followed by Africa (37 percent) and North and Central America (35 percent).

TABLE 37. Top ten countries for volume of forest growing stock, 2025

Ranking	Country	Growing stock (million m³)	% of global growing stock	Cumulative %
1	Russian Federation	125 677	20	20
2	Brazil	117 682	19	39
3	Canada	50 384	8	47
4	United States of America	45 770	7	54
5	Democratic Republic of the Congo	33 962	5	59
6	China	21 206	3	63
7	Indonesia	17 667	3	65
8	Colombia	16 717	3	68
9	Venezuela (Bolivarian Republic of)	10 472	2	70
10	Peru	9 320	1	71

TABLE 38. Growing stock in naturally regenerating forest and planted forest, by region and subregion, 2025

Region/subregion	Forest growing stock					
	Total (million m³)		% of total		Per unit area (m³/ha)	
	Naturally regenerating	Planted	Naturally regenerating	Planted	Naturally regenerating	Planted
Eastern and Southern Africa	18 210	909	95	5	62.7	162
Northern Africa	1 324	120	92	8	36.1	51.3
Western and Central Africa	63 813	755	99	1	199	123
Africa	**83 348**	**1 784**	**98**	**2**	**129**	**127**
East Asia	20 064	9 673	67	33	116	90.8
South and Southeast Asia	34 789	3 427	91	9	133	104
Western and Central Asia	3 791	371	91	9	76.6	54.8
Asia	**58 644**	**13 471**	**81**	**19**	**121**	**92.2**
Europe, with data for the Russian Federation subtracted	23 926	11 805	67	33	165	199
Europe	**145 298**	**16 110**	**90**	**10**	**152**	**201**
Caribbean	634	87.4	88	12	85.1	92.7
Central America	4 136	92.2	98	2	178	152
North America	92 991	6 908	93	7	134	143
North and Central America	**97 760**	**7 087**	**93**	**7**	**135**	**142**
Oceania	**21 065**	**1 083**	**95**	**5**	**118**	**220**
South America	**180 147**	**4 010**	**98**	**2**	**217**	**231**
WORLD	**586 262**	**43 545**	**93**	**7**	**153**	**139**

Note: The discrepancy between total forest growing stock and the sum of growing stock in naturally regenerating and planted forests is because some European countries and areas did not report forest area by the main forest categories.

FIGURE 18. Proportion of growing stock in naturally regenerating and planted forests, by region and globally, 2025

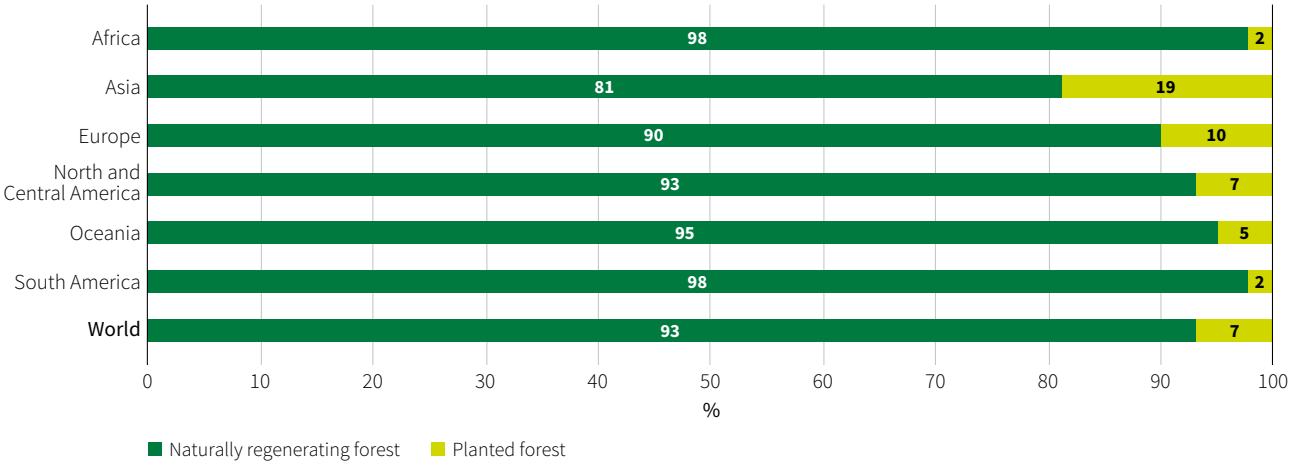


FIGURE 19. Growing stock per unit area in naturally regenerating and planted forests, by region and globally, 2025

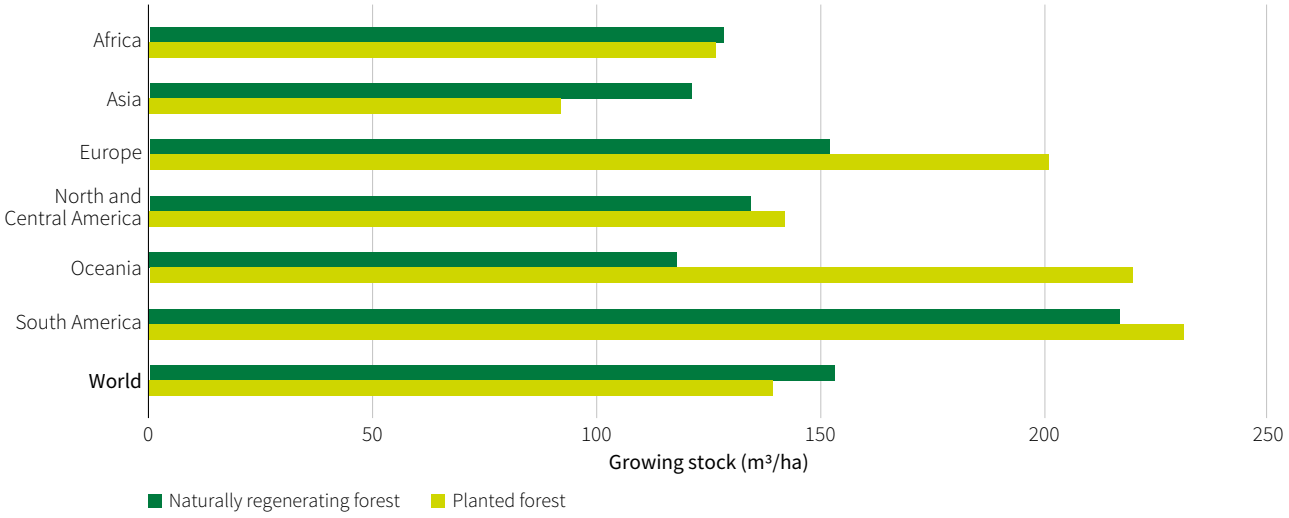


TABLE 39. Primary-forest growing stock, by region and subregion, 2025

Region/subregion	Primary-forest growing stock				
	Total (million m³)	As % of total growing stock in forest	As % of global primary–forest growing stock	As % of global forest growing stock	Per unit area (m³/ha)
Eastern and Southern Africa	2 072	11	1	n.s.	61.6
Northern Africa	18.0	1	n.s.	n.s.	15.8
Western and Central Africa	29 587	46	14	5	230
Africa	**31 677**	**37**	**15**	**5**	**194**
East Asia	3 743	13	2	1	235
South and Southeast Asia	11 858	31	6	2	178
Western and Central Asia	269	6	n.s.	n.s.	100
Asia	**15 870**	**22**	**8**	**3**	**186**
Europe, with data for the Russian Federation subtracted	502	1	n.s.	n.s.	116
Europe	**46 346**	**29**	**22**	**7**	**149**
Caribbean	51.8	7	n.s.	n.s.	106
Central America	194	5	n.s.	n.s.	162
North America	36 161	36	18	6	130
North and Central America	**36 407**	**35**	**18**	**6**	**130**
Oceania	**5 062**	**23**	**2**	**1**	**132**
South America	**71 090**	**39**	**34**	**11**	**238**
WORLD	**206 452**	**33**	**100**	**33**	**176**

Note: n.s. = not significant.

TABLE 40. Planted-forest growing stock, by subcategory and by region and subregion, 2025

Region/subregion	Planted-forest growing stock							
	Plantation forest					Other planted forest		
	Total			Of introduced species				
	million m^3	% of total in planted forests	% of global forest growing stock	million m^3	% of total growing stock in plantation forest	million m^3	% of total in planted forests	% of global forest growing stock
Eastern and Southern Africa	777	86	0.1	655	84	132	14	n.s.
Northern Africa	88.0	73	n.s.	31.9	36	31.9	27	n.s.
Western and Central Africa	681	90	0.1	387	57	74.7	10	n.s.
Africa	**1 546**	**87**	**0.2**	**1 074**	**69**	**238**	**13**	**n.s.**
East Asia	4 981	51	0.8	1 348	27	4 693	49	0.7
South and Southeast Asia	3 030	88	0.5	1 776	59	397	12	0.1
Western and Central Asia	173	47	n.s.	22.8	13	198	53	n.s.
Asia	**8 184**	**61**	**1.3**	**3 147**	**38**	**5 287**	**39**	**0.8**
Europe, with data for the Russian Federation subtracted	725	6	0.1	445	61	11 106	94	1.8
Europe	**725**	**4**	**0.1**	**445**	**61**	**15 411**	**96**	**2.4**
Caribbean	44.0	50	n.s.	25.2	57	43.4	50	n.s.
Central America	70.4	76	n.s.	6.39	9	21.8	24	n.s.
North America	1 955	28	0.3	53.4	3	4 953	72	0.8
North and Central America	**2 069**	**29**	**0.3**	**85.0**	**4**	**5 018**	**71**	**0.8**
Oceania	**1 047**	**97**	**0.2**	**966**	**92**	**35.3**	**3**	**n.s.**
South America	**4 002**	**100**	**0.6**	**3 776**	**94**	**8.20**	**n.s.**	**n.s.**
WORLD	**17 573**	**40**	**2.8**	**9 493**	**54**	**25 998**	**60**	**4.1**

Note: n.s. = not significant.

Of the subregions, Western and Central Africa stands out for its high proportion of total growing stock in primary forests (46 percent). Globally, the average growing stock in primary forests is estimated at 176 m^3 per ha, with a notably high density in South America (238 m^3 per ha).

Although only 85 countries and areas provided specific data on growing stock in primary forests, the analysis here covers all 167 countries and areas that reported having primary-forest area. For the 82 countries and areas that reported having primary forests but did not report on primary-forest growing stock, estimates were derived by applying the average growing stock per ha in naturally regenerating forests to primary forests. This approach likely underestimates the global primary-forest stock because growing-stock densities are typically higher in primary forests than in naturally regenerating forest (as indicated for most countries and areas reporting on this variable).

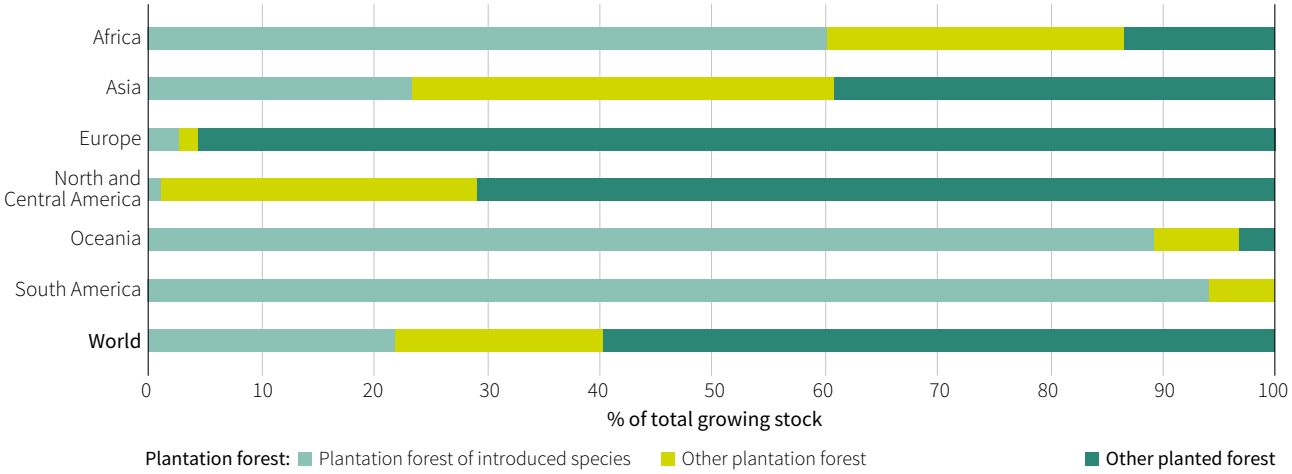
PLANTED-FOREST GROWING STOCK, BY SUBCATEGORY

FRA 2025 received data on growing stock in plantation forests in 2025 from 183 countries and areas representing 93 percent of the global area of this subcategory of planted forests; on growing stock in plantation forests composed of introduced species from 155 countries and areas representing 68 percent of the global area of this subcategory; and on growing stock in other planted forests from 180 countries and areas representing 82 percent of the global area of this subcategory.

Plantation forests account for 3 percent of the total forest growing stock in 2025 and for 40 percent of the total planted-forest growing stock (Table 40). Other planted forests contribute 4 percent of the total forest growing stock and 60 percent of the total planted-forest growing stock.

Of the regions, Asia has the largest volume of growing stock in plantation forests, at 8.18 billion m^3, which is

FIGURE 20. Distribution of total growing stock in planted forests in three subcategories, by region and globally, 2025



47 percent of the global plantation-forest growing stock, followed by South America (4.0 billion m^3, 23 percent). Nearly all (99.8 percent) of the planted-forest growing stock in South America is in plantation forests; the proportions are also high in Oceania (97 percent) and Africa (87 percent) (Figure 20). Conversely, plantation forests constitute only a small share (4 percent) of the planted-forest growing stock in Europe.

Globally, 54 percent of the plantation-forest growing stock is composed of introduced species. Of the regions, South America has the highest total volume (3.78 billion m^3) of plantation forests of introduced species in 2025; its planted-forest area is composed mostly (94 percent) of this subcategory.

At the global level, average growing-stock density is higher in other planted forests (168 m^3 per ha) than in plantation forests (112 m^3 per ha), although this varies by region. Plantation forests composed of introduced species – which are often fast-growing – exhibit higher growing-stock densities (146 m^3 per ha) than the overall average for plantation forests.

GROWING STOCK IN OTHER WOODED LAND

One hundred and thirty-two countries and areas representing 65 percent of the global area of OWL reported data on growing stock for this category. Where data were unavailable, subregional averages of growing stock per unit area were applied to estimates of OWL area to estimate growing stock. Given the relatively low coverage of data for OWL area and growing stock, the results presented here should be viewed with caution.

The total volume of growing stock in OWL in 2025 is estimated at 20.2 billion m^3 (3 percent of the world's

TABLE 41. Growing stock in other wooded land, by region and subregion, 2025

Region/subregion	Growing stock in other wooded land		
	Total (million m^3)	As % of global other wooded land growing stock	Per unit area (m^3/ha)
Eastern and Southern Africa	2 494	12	8.32
Northern Africa	190	1	2.86
Western and Central Africa	1 028	5	8.86
Africa	**3 712**	**18**	**7.70**
East Asia	1 703	8	15.7
South and Southeast Asia	636	3	13.2
Western and Central Asia	198	1	8.03
Asia	**2 538**	**13**	**14.0**
Europe, with data for the Russian Federation subtracted	390	2	16.2
Europe	**8 919**	**44**	**71.6**
Caribbean	87.5	n.s.	24.2
Central America	77.3	n.s.	18.7
North America	727	4	9.42
North and Central America	**892**	**4**	**10.5**
Oceania	**1 571**	**8**	**36.6**
South America	**2 586**	**13**	**14.8**
WORLD	**20 217**	**100**	**18.5**

Note: n.s. = not significant.

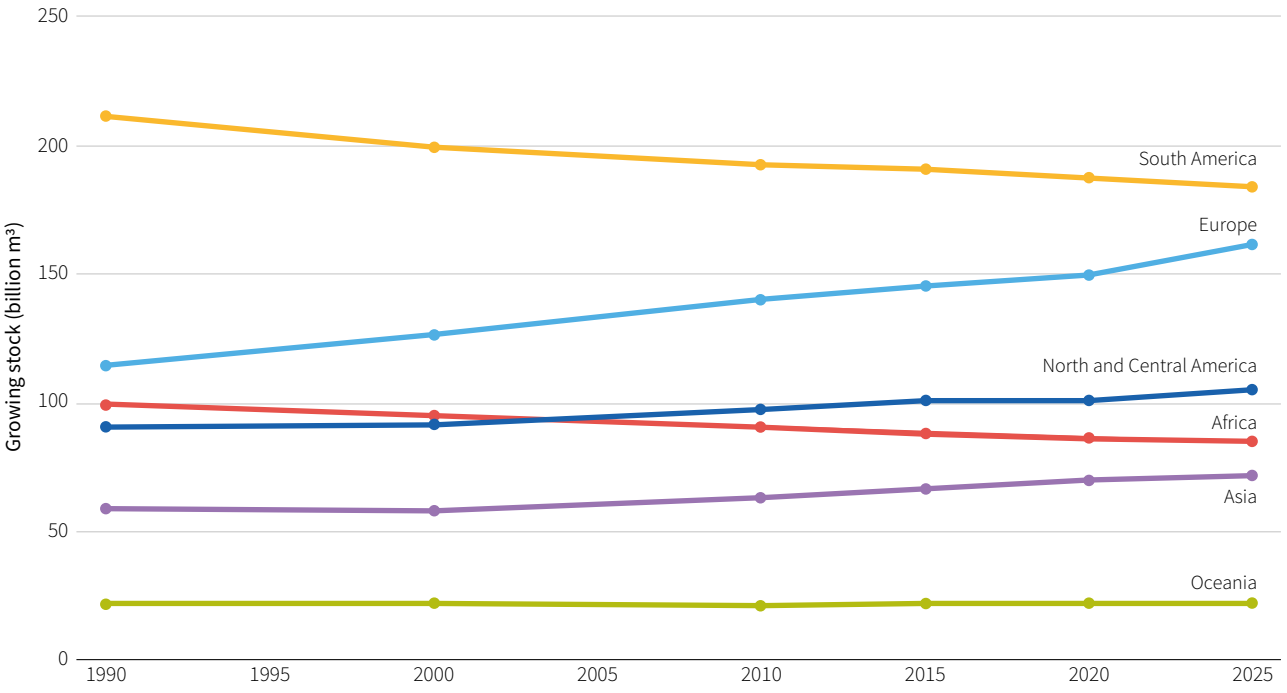
TABLE 42. Forest growing stock, by region and subregion, 1990–2025

Region/subregion	Forest growing stock (million m³)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	23 551	22 308	20 998	20 263	19 617	19 119
Northern Africa	1 497	1 491	1 475	1 467	1 459	1 444
Western and Central Africa	74 170	71 147	68 370	66 521	65 451	64 569
Africa	**99 219**	**94 946**	**90 844**	**88 251**	**86 527**	**85 132**
East Asia	15 691	17 796	22 310	25 045	27 508	29 736
South and Southeast Asia	40 665	36 592	37 460	37 413	38 259	38 216
Western and Central Asia	2 968	3 306	3 624	3 932	4 034	4 162
Asia	**59 324**	**57 694**	**63 394**	**66 390**	**69 801**	**72 115**
Europe, with data for the Russian Federation subtracted	24 987	28 658	32 443	33 961	35 330	35 863
Europe	**114 572**	**126 563**	**139 991**	**145 203**	**149 977**	**161 540**
Caribbean	617	656	697	712	720	722
Central America	4 964	4 607	4 578	4 659	4 187	4 229
North America	84 861	86 472	92 225	95 559	95 915	99 900
North and Central America	**90 441**	**91 735**	**97 501**	**100 930**	**100 822**	**104 850**
Oceania	**21 921**	**21 909**	**21 887**	**22 042**	**22 090**	**22 148**
South America	**211 032**	**199 628**	**192 284**	**190 710**	**187 776**	**184 157**
WORLD	**596 509**	**592 475**	**605 901**	**613 527**	**616 994**	**629 941**

TABLE 43. Annual change in forest growing stock, by region and subregion, 1990–2025

Region/subregion	Change in forest growing stock (million m³/year)		
	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	−124	−136	−114
Northern Africa	−0.60	−1.62	−2.32
Western and Central Africa	−302	−308	− 195
Africa	**−427**	**−446**	**−312**
East Asia	210	483	469
South and Southeast Asia	−407	54.7	80.3
Western and Central Asia	33.9	41.7	23.0
Asia	**−163**	**580**	**572**
Europe, with data for the Russian Federation subtracted	367	354	190
Europe	**1 199**	**1 243**	**1 634**
Caribbean	3.96	3.69	1.02
Central America	−35.7	3.50	−43.1
North America	161	606	434
North and Central America	**129**	**613**	**392**
Oceania	**−1.26**	**8.87**	**10.6**
South America	**−1 140**	**−595**	**−655**
WORLD	**−403**	**1 403**	**1 641**

FIGURE 21. Forest growing stock, by region, 1990–2025



forest growing stock) (Table 41). Of this, 44 percent is in Europe, primarily the Russian Federation.

The average growing stock per unit area in OWL is estimated at 19 m^3 per ha globally, with averages ranging from 3 m^3 per ha (Northern Africa) to 72 m^3 per ha (Europe).

TRENDS

FRA 2025 received complete time-series data on forest growing stock for the period 1990–2025 from 214 countries and areas representing 97 percent of the global forest area. For countries and areas that did not provide data, growing stock was estimated using subregional averages of growing stock per ha and forest area at each point in the time series. To ensure a complete and consistent dataset without gaps, missing values were interpolated for countries and areas with incomplete time series using the closest year for which data were available on growing stock per unit area.

After a decline in the 1990s, the volume of forest growing stock globally rose significantly between 2000 and 2025, from 592 billion m^3 to 630 billion m^3. There were contrasting regional patterns, however, with substantial increases in Europe (notably the Russian Federation), North America and Asia over the period and marked decreases in South America and Africa (Table 42, Table 43 and Figure 21). Some tropical subregions, such as Western and Central Africa, experienced a slowdown in the average annual decline of growing stock in 2015–2025 compared with 2000–2015. In contrast, the rate of decline in forest growing stock accelerated in South America between the two periods. In Central America, change in forest growing stock was positive in 2000–2015 (at 3.5 million m^3 per year) and negative in 2015–2025 (at 43.1 million m^3 per year).

The global forest growing stock per unit area increased by 11 percent between 1990 and 2025, with growth in all regions and nearly all subregions (Table 44). The increase was particularly marked in Europe and East Asia, likely driven by factors such as improved forest management and (especially in China – Lu *et al*., 2018; Yue, Zhang and Shao, 2021) large-scale reforestation programmes. Growing stock per ha also increased significantly in the Russian Federation and the United States of America in the decade to 2025.

Trend by main forest category. The proportion of total forest growing stock held by planted forests increased steadily, from 3 percent in 1990 to 7 percent in 2025 (Figure 22); the volume of growing stock in planted forests more than doubled over the period. This upward trend is consistent across all regions, with the most significant increases in East Asia (a 19 percent increase between 1990 and 2025) and North and Central America (a 5 percent increase over the period). The share of the total

TABLE 44. Forest growing stock per unit area, by region and subregion, 1990–2025

Region/subregion	Forest growing stock (m^3/ha)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	67.2	66.2	65.3	65.0	64.6	64.6
Northern Africa	33.3	34.5	35.5	36.0	36.6	37.0
Western and Central Africa	193	194	195	196	196	197
Africa	**127**	**127**	**127**	**127**	**128**	**128**
East Asia	74.6	77.3	87.9	95.1	101	106
South and Southeast Asia	127	124	126	126	129	130
Western and Central Asia	58.1	63.6	67.8	72.2	72.9	74.0
Asia	**102**	**100**	**105**	**108**	**112**	**114**
Europe, with data for the Russian Federation subtracted	134	148	163	169	173	174
Europe	**115**	**126**	**137**	**142**	**145**	**155**
Caribbean	91.5	90.0	88.1	86.2	86.2	86.0
Central America	168	169	181	187	173	178
North America	115	118	124	128	129	134
North and Central America	**117**	**119**	**126**	**130**	**130**	**135**
Oceania	**119**	**120**	**121**	**121**	**121**	**120**
South America	**205**	**209**	**212**	**214**	**216**	**217**
WORLD	**137**	**140**	**144**	**147**	**148**	**152**

FIGURE 22. Proportion of total forest growing stock held in planted forests, by region and globally, 1990–2025

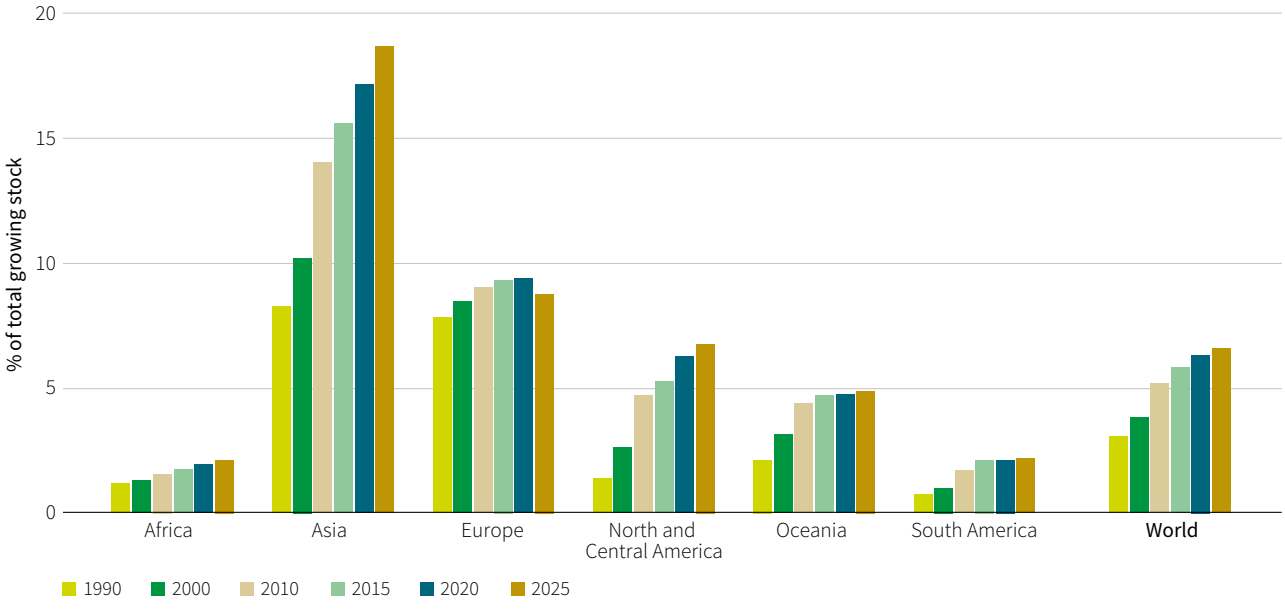


TABLE 45. Growing stock per unit area in naturally regenerating and planted forests, by region and subregion, 1990–2025

Region/ subregion	Growing stock per unit area (m^3/ha)											
	1990		2000		2010		2015		2020		2025	
	Naturally regenerating	Planted	Naturally regenerating	Planted	Naturally regenerating	Planted	Naturally regenerating	Planted	Naturally regenerating	Planted	Naturally regenerating	Planted
Eastern and Southern Africa	65.9	170	64.7	170	63.7	167	63.3	166	62.8	163	62.7	162
Northern Africa	32.5	51.1	33.7	49.8	34.8	48.8	35.2	49.8	35.7	51.3	36.1	51.3
Western and Central Africa	194	120	195	118	196	115	197	116	198	121	199	123
Africa	**127**	**130**	**127**	**128**	**127**	**125**	**128**	**125**	**128**	**126**	**129**	**127**
East Asia	88.4	37.7	91.5	43.9	100	65.2	106	74.3	112	82.1	116	90.8
South and Southeast Asia	128	112	125	110	127	110	128	109	133	101	133	104
Western and Central Asia	58.8	52.3	64.9	53.3	69.9	52.8	74.6	54.6	75.4	53.7	76.6	54.8
Asia	**109**	**57.7**	**108**	**60.3**	**112**	**74.3**	**115**	**81.1**	**120**	**85.0**	**121**	**92.2**
Europe, with data for the Russian Federation subtracted	132	53.2	145	145	143	59.7	163	157	166	67.0	168	159
Europe	**113**	**152**	**123**	**168**	**133**	**181**	**137**	**188**	**141**	**192**	**152**	**192**
Caribbean	91.0	98.5	89.3	98.4	87.2	96.2	85.2	94.3	85.2	94.1	85.1	92.7
Central America	168	144	169	120	182	137	188	147	173	146	178	152
North America	117	52.9	120	72.6	125	113	129	121	128	134	134	143
North and Central America	**119**	**54.0**	**121**	**73.2**	**126**	**112**	**130**	**121**	**129**	**133**	**135**	**142**
Oceania	**118**	**162**	**118**	**178**	**119**	**203**	**118**	**219**	**118**	**229**	**118**	**220**
South America	**205**	**240**	**209**	**225**	**212**	**230**	**214**	**233**	**215**	**231**	**217**	**231**
WORLD	**139**	**98.5**	**142**	**105**	**146**	**121**	**148**	**128**	**149**	**131**	**153**	**135**

Note: The difference between the values for 2025 and those in Figure 19 is due to an incomplete time series for Europe.

planted-forest growing stock held by plantation forests increased from 38 percent in 1990 to 42 percent in 2025.

Growing stock per unit area increased in both naturally regenerating and planted forests (Table 45). The rise was particularly pronounced in planted forests, likely due to the use of fast-growing tree species in plantation forests and improved forest management.

Growing-stock composition

STATUS

FRA 2025 received information on the composition of forest growing stock from 105 countries and areas representing 68 percent of the world's forest area and 63 percent of its growing stock. Countries reported for the latest year for which data were available. Given that some data received were only partial, the analysis was made based on 95 countries and areas representing 66 percent of the forest area and 60 percent of the total growing stock. Data coverage is particularly low for Africa (particularly Western and Central Africa), Oceania and South America; therefore, the results presented here for those regions should be viewed with caution.

For FRA 2025, submitting countries and areas were able to select species from a drop-down menu in the FRA reporting platform, which considerably reduced inconsistencies in the taxonomic nomenclature. Increasing the availability and quality of data on growing-stock composition is a formidable task for many countries and areas, especially in the tropics, where the diversity of tree species is very high. Assisting in this, improved information is now available on the world's tree species (e.g. BGCI, 2021), including tools such as national tree checklists and field identification guides. Global checklists of tree species are also available, for example the GlobalTreeSearch database (Hill, Beech and Rivers, 2024) and Plants of the World Online (Royal Botanic Gardens Kew, 2025). Globally, there are nearly 58 000 named tree species classified into 266 taxonomic families and nearly 4 200 genera (BGCI, 2024).

It is estimated that the global forest growing stock comprises 98 percent native tree species and 2 percent introduced tree species (Table 46). The reported composition of growing stock is dominated by native tree species in all regions, with the share highest in North and Central America (100 percent) and Europe (99 percent) and lowest in Oceania (82 percent).

The species reported as the most common native and introduced tree species in the growing stock belong to 385 genera. The number of reported genera is highest

TABLE 46. Composition of forest growing stock, by region and subregion, 2025

Region/subregion	Data availability			% of total forest growing stock	
	No. of reporting countries/areas	% of forest area	% of growing stock	Native species	Introduced species
Eastern and Southern Africa	6	49	45	98	2
Northern Africa	4	77	46	98	2
Western and Central Africa	4	6	1	95	5
Africa	**14**	**29**	**12**	**98**	**2**
East Asia	4	97	98	96	4
South and Southeast Asia	10	76	85	93	7
Western and Central Asia	7	55	65	100	n.s.
Asia	**21**	**83**	**89**	**95**	**5**
Europe, with data for the Russian Federation subtracted	34	91	91	95	5
Europe	**35**	**98**	**98**	**99**	**1**
Caribbean	5	14	20	86	14
Central America	2	44	44	94	6
North America	4	100	100	100	n.s.
North and Central America	**11**	**97**	**97**	**100**	**n.s.**
Oceania	**6**	**6**	**19**	**82**	**18**
South America	**8**	**26**	**20**	**97**	**3**
WORLD	**95**	**66**	**60**	**98**	**2**

Note: n.s. = not significant.

TABLE 47. Top ten genera globally for growing stock, by volume, 2025

Rank	Genus	Growing stock (million m³)	% of global forest growing stock
1	*Pinus*	54 046	8.6
2	*Picea*	43 738	6.9
3	*Betula*	27 584	4.4
4	*Larix*	27 308	4.3
5	*Populus*	16 183	2.6
6	*Abies*	11 151	1.8
7	*Quercus*	9 802	1.6
8	*Pseudotsuga*	7 191	1.1
9	*Fagus*	4 490	0.7
10	*Nothofagus*	4 320	0.7

Note: The ranking should be viewed with caution because data coverage is low for Africa (particularly Western and Central Africa), Oceania and South America. Therefore, some tropical species with large growing stocks may not be included.

in Africa (158) and Asia (127), followed by North and Central America (88) and Oceania (74). Many of the submitted reports were incomplete in the information provided on this attribute, however, and several countries and areas provided composition at only the genus level. Table 47 shows the reported top ten (by volume) genera globally, and Table 48 shows the top five genera by region.

Biomass

STATUS

FRA 2025 received data on aboveground and belowground forest biomass for 2025 from 215 countries and areas representing nearly 100 percent of the world's forests. Information on deadwood biomass was reported by 101 countries and areas accounting for 78 percent of the global forest area. For those countries and areas that did not provide data, estimates of aboveground, belowground and deadwood biomass were derived primarily by applying subregional averages per ha to the respective forest areas.

The total biomass in the world's forests is estimated at 709 gigatonnes (Gt), equivalent to 171 tonnes per ha. Living biomass, encompassing aboveground and belowground biomass, amounts to nearly 647 Gt, or approximately 156 tonnes per ha (Table 49). Of this total, 79 percent is aboveground biomass and 21 percent is belowground biomass. Deadwood biomass in the world's forests is estimated at 61.9 Gt of dry matter, equivalent to 14.9 tonnes per ha and representing 9 percent of the global forest biomass (Figure 23).

TABLE 48. Top five genera for volume of growing stock, by region, 2025

Region	Rank	Genus	Growing stock (million m³)	% of total forest growing stock
Africa	1	*Brachystegia*	1 321	1.6
	2	*Pouteria*	666	0.8
	3	*Julbernardia*	574	0.7
	4	*Syzygium*	422	0.5
	5	*Juniperus*	399	0.5
Asia	1	*Pinus*	4 256	5.9
	2	*Larix*	2 547	3.5
	3	*Quercus*	2 475	3.4
	4	*Shorea*	2 131	3.0
	5	*Cryptomeria*	2 046	2.8
Europe	1	*Pinus*	36 806	22.8
	2	*Betula*	26 556	16.4
	3	*Larix*	24 760	15.3
	4	*Picea*	22 842	14.1
	5	*Populus*	10 632	6.6
North and Central America	1	*Picea*	19 723	18.8
	2	*Pinus*	11 632	11.1
	3	*Pseudotsuga*	6 883	6.6
	4	*Populus*	4 956	4.7
	5	*Abies*	3 463	3.3
Oceania	1	*Nothofagus*	1 401	6.3
	2	*Pinus*	708	3.2
	3	*Pterophylla*	324	1.5
	4	*Dacrydium*	155	0.7
	5	*Beilschmiedia*	139	0.6
South America	1	*Nothofagus*	2 919	1.6
	2	*Eperua*	1 147	0.6
	3	*Eschweilera*	613	0.3
	4	*Hura*	589	0.3
		Pinus	500	0.3

Note: The ranking should be viewed with caution because data coverage is low for Africa (particularly Western and Central Africa), Oceania and South America. Therefore, some tropical species with large growing stocks may not be included.

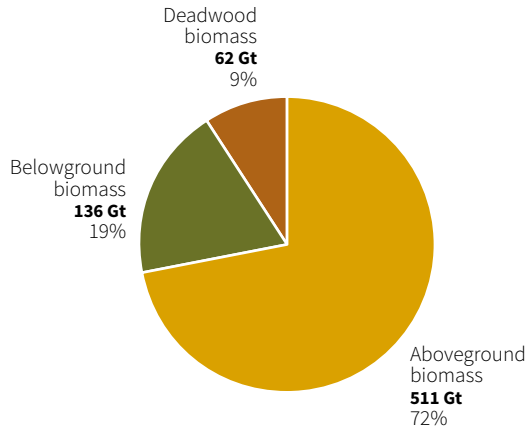
Of the regions, South America holds the largest share of global forest biomass, accounting for nearly one-third of the total (Figure 24). Regions with tropical forests exhibit the highest biomass densities, which exceed 200 tonnes per ha in Oceania and South America. The average biomass per unit area in Africa is 194 tonnes per ha – although it reaches 300 tonnes per ha in Western and Central Africa.

TABLE 49. Volume of aboveground, belowground and deadwood biomass in forests, by region and subregion, 2025

Region/subregion	Aboveground		Belowground		Deadwood		Total		
	million tonnes	tonnes/ha	million tonnes	tonnes/ha	million tonnes	tonnes/ha	million tonnes	tonnes/ha	% of total biomass
Eastern and Southern Africa	21 384	72.2	6 059	20.5	765	2.58	28 208	95.3	4
Northern Africa	1 581	40.6	490	12.6	37.5	0.96	2 108	54.1	n.s.
Western and Central Africa	68 254	208	22 328	68.2	7 763	23.70	98 345	300	14
Africa	**91 219**	**138**	**28 877**	**43.6**	**8 566**	**12.9**	**128 661**	**194**	**18**
East Asia	22 006	78.5	5 832	20.8	3 450	12.3	31 288	112	4
South and Southeast Asia	41 706	142	11 117	37.9	781	2.66	53 603	183	8
Western and Central Asia	4 065	72.2	1 135	20.2	107	1.90	5 307	94.3	1
Asia	**67 777**	**108**	**18 084**	**28.7**	**4 337**	**6.88**	**90 198**	**143**	**13**
Europe, with data for the Russian Federation subtracted	23 949	116	5 618	27.2	1 806	8.75	31 372	152	4
Europe	**93 412**	**89.9**	**25 322**	**24.4**	**10 299**	**9.91**	**129 033**	**124**	**18**
Caribbean	926	110	241	28.7	83.7	9.96	1 251	149	n.s.
Central America	3 075	129	842	35.4	226	9.51	4 143	174	1
North America	75 509	101	16 256	21.9	22 264	29.9	114 029	153	16
North and Central America	**79 510**	**102**	**17 339**	**22.3**	**22 574**	**29.1**	**119 423**	**154**	**17**
Oceania	**22 943**	**125**	**9 318**	**50.7**	**5 157**	**28.0**	**37 418**	**203**	**5**
South America	**155 828**	**184**	**37 340**	**44.0**	**10 959**	**12.9**	**204 126**	**241**	**29**
WORLD	**510 689**	**123**	**136 279**	**32.9**	**61 891**	**14.9**	**708 858**	**171**	**100**

Note: n.s. = not significant.

FIGURE 23. Global aboveground, belowground and deadwood biomass, 2025



TRENDS

FRA 2025 received complete time-series data on aboveground and belowground forest biomass from 210 countries and areas representing more than 99 percent of the global forest area. Ninety countries and areas representing 77 percent of the global forest area provided complete time series for deadwood biomass. For countries and areas that did not report data for any years, biomass estimates were derived by applying subregional averages of biomass per ha to estimates of forest area for each time point. Where the time series for aboveground, belowground or deadwood biomass was incomplete for a specific country or area, change rate in aboveground biomass (if available) or growing stock was used to interpolate missing data.

The global trend in biomass reversed from a decline in the 1990s to steady gains between 2000 and 2025 (Table 50). The biomass stock grew by approximately 11.0 Gt between 1990 and 2025 (Table 51), an increase of 1.6 percent. Regional trends showed contrasting patterns, however. South America and Africa experienced significant losses in biomass stock over the period – 857 million tonnes per year and 529 million tonnes per year, respectively (Table 52) – due primarily to the loss of

FIGURE 24. Volume of aboveground, belowground and deadwood biomass, by region, 2025

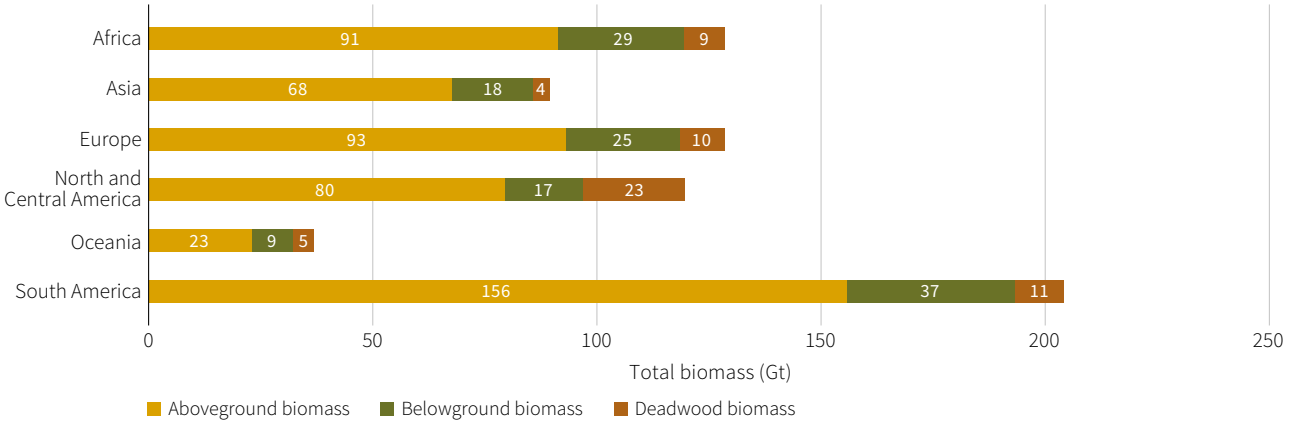


TABLE 50. Total forest biomass, by region and subregion, 1990–2025

Region/subregion	Forest biomass (million tonnes)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	33 606	32 112	30 481	29 578	28 603	28 208
Northern Africa	2 044	2 094	2 122	2 113	2 257	2 108
Western and Central Africa	111 522	107 608	103 777	100 988	99 565	98 345
Africa	**147 172**	**141 814**	**136 381**	**132 680**	**130 425**	**128 661**
East Asia	16 727	19 660	23 135	25 840	28 632	31 288
South and Southeast Asia	55 993	50 855	51 496	51 535	53 454	53 603
Western and Central Asia	4 508	4 744	5 004	5 206	5 271	5 307
Asia	**77 228**	**75 259**	**79 635**	**82 581**	**87 356**	**90 198**
Europe, with data for the Russian Federation subtracted	21 116	24 414	27 739	29 313	30 505	31 372
Europe	**97 461**	**106 566**	**116 811**	**121 081**	**124 758**	**129 033**
Caribbean	1 013	1 073	1 209	1 228	1 259	1 251
Central America	4 699	4 359	4 189	4 221	4 071	4 143
North America	98 490	102 868	108 484	111 073	112 919	114 029
North and Central America	**104 202**	**108 300**	**113 881**	**116 522**	**118 249**	**119 423**
Oceania	**37 720**	**37 507**	**37 194**	**37 333**	**37 336**	**37 418**
South America	**234 108**	**221 863**	**213 004**	**211 008**	**207 862**	**204 126**
WORLD	**697 892**	**691 307**	**696 906**	**701 205**	**705 986**	**708 858**

forest area. In contrast, there were substantial increases in biomass in East Asia, Europe and North America, driven by expansions in forest area and increases in biomass per unit area (Figure 25). The trend in biomass stock in Asia, particularly South and Southeast Asia, reversed from significant declines in the 1990s to increases over the period 2000–2025.

Forest biomass per unit area increased by 10.5 tonnes per ha globally between 1990 and 2025, a rise of 7 percent. Increases were observed in all regions and subregions except the Caribbean, Eastern and Southern Africa, and Oceania, where it was stable. East Asia and Europe (data for the Russian Federation subtracted) exhibited the largest gains in biomass per unit area between 1990 and 2025.

TABLE 51. Forest biomass by unit area, by region and subregion, 1990–2025

Region/subregion	Forest biomass (tonnes/ha)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	95.9	95.2	94.9	94.9	94.2	95.3
Northern Africa	45.4	48.4	51.1	51.9	56.7	54.1
Western and Central Africa	290	294	297	297	299	300
Africa	**189**	**190**	**191**	**192**	**193**	**194**
East Asia	79.5	85.5	91.2	98.1	105	112
South and Southeast Asia	175	172	173	174	180	183
Western and Central Asia	88.3	91.3	93.7	95.6	95.2	94.3
Asia	**133**	**130**	**132**	**135**	**140**	**143**
Europe, with data for the Russian Federation subtracted	113	126	139	146	149	152
Europe	**97.7**	**106**	**114**	**118**	**121**	**124**
Caribbean	150	147	153	149	151	149
Central America	159	160	166	170	168	174
North America	134	140	146	149	152	153
North and Central America	**135**	**141**	**147**	**150**	**152**	**154**
Oceania	**205**	**205**	**205**	**205**	**204**	**203**
South America	**228**	**232**	**235**	**237**	**239**	**241**
WORLD	**161**	**163**	**166**	**168**	**169**	**171**

TABLE 52. Change in forest biomass, by region and subregion, 1990–2025

Region/subregion	Annual change (million tonnes/year)		
	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	−149	−169	−137
Northern Africa	4.98	1.30	−0.50
Western and Central Africa	−391	−441	−264
Africa	**−536**	**−609**	**−402**
East Asia	293	412	545
South and Southeast Asia	−514	45.4	207
Western and Central Asia	23.6	30.8	10.1
Asia	**−197**	**488**	**762**
Europe, with data for the Russian Federation subtracted	330	327	206
Europe	**910**	**968**	**795**
Caribbean	5.91	10.3	2.30
Central America	−34.1	−9.18	−7.79
North America	438	547	296
North and Central America	**410**	**548**	**290**
Oceania	**−21.4**	**−11.6**	**8.51**
South America	**−1 225**	**−724**	**−688**
WORLD	**−658**	**660**	**765**

Globally, the rate of increase accelerated from 0.25 tonnes per ha per year in 1990–2000 to 0.35 tonnes per ha per year in 2015–2025.

Although many countries and areas used IPCC default conversion factors to estimate biomass from growing stock, it is becoming more common to use national data to refine these estimates.

Table 53 shows the average biomass conversion and expansion factor (BCEF),[11] root–shoot ratio[12] and dead–live ratio,[13] by subregion and region, based on estimates of growing stock and biomass for 2025. The calculated factors align with the default ranges outlined by the IPCC.

Carbon stock

STATUS

FRA 2025 received information on forest carbon stock in 2025 from 215 countries and areas representing nearly 100 percent of the world's forests. Data were provided

[11] The BCEF is calculated by dividing aboveground biomass (in tonnes) by the growing stock (in m^3).

[12] The root–shoot ratio is determined by dividing belowground biomass by aboveground biomass.

[13] The dead–live ratio is calculated by dividing the dry weight of deadwood by the total living biomass (the sum of aboveground and belowground biomass).

FIGURE 25. Regional trends in total forest biomass, by region, 1990–2025

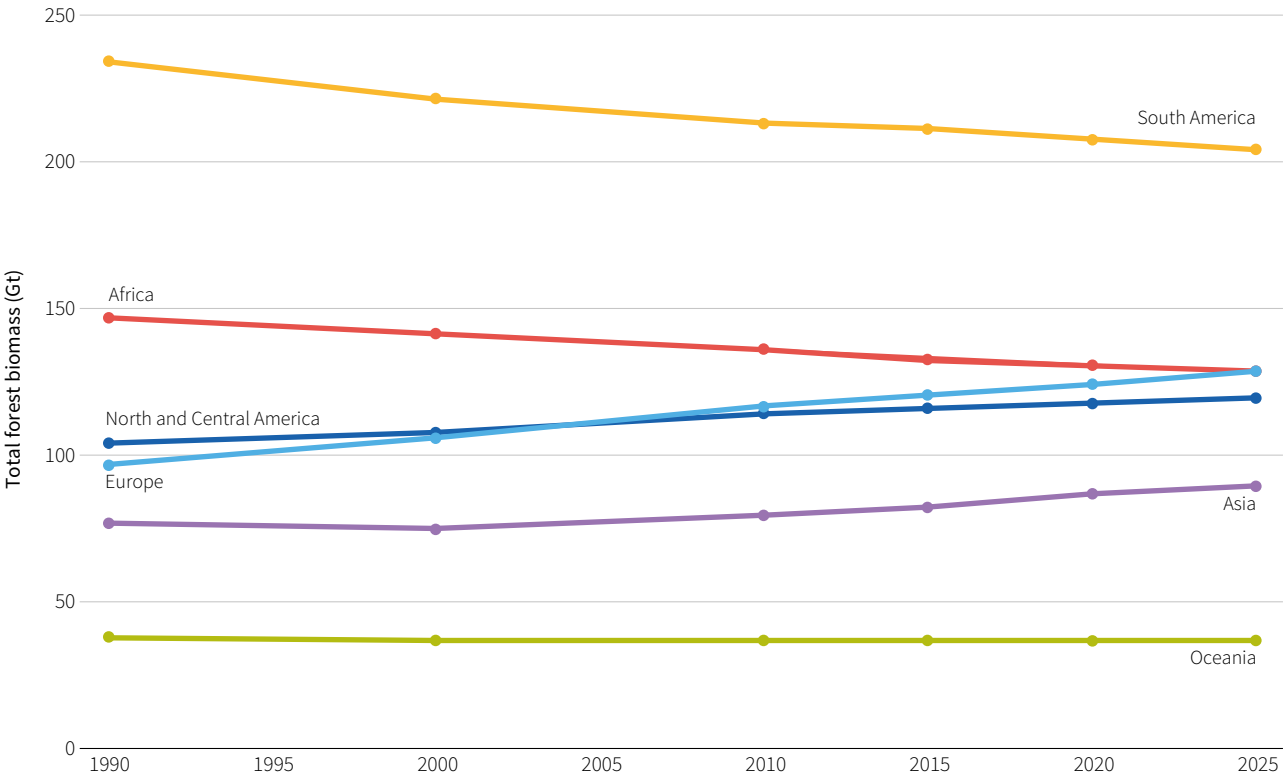


TABLE 53. Average forest biomass conversion and expansion factor, root–shoot ratio and dead–live ratio, by region and subregion, 2025

Region/subregion	Forest biomass conversion and expansion factor	Root–shoot ratio	Dead–live ratio
Eastern and Southern Africa	1.12	0.28	0.03
Northern Africa	1.10	0.31	0.02
Western and Central Africa	1.06	0.33	0.09
Africa	**1.07**	**0.32**	**0.07**
East Asia	0.74	0.27	0.12
South and Southeast Asia	1.09	0.27	0.01
Western and Central Asia	0.98	0.28	0.02
Asia	**0.94**	**0.27**	**0.05**
Europe, with data for the Russian Federation subtracted	0.67	0.23	0.06
Europe	**0.58**	**0.27**	**0.09**
Caribbean	1.28	0.26	0.07
Central America	0.73	0.27	0.06
North America	0.76	0.22	0.24
North and Central America	**0.76**	**0.22**	**0.23**
Oceania	**1.04**	**0.41**	**0.16**
South America	**0.85**	**0.24**	**0.06**
WORLD	**0.81**	**0.27**	**0.10**

TABLE 54. Forest carbon stock in five carbon pools, by region and subregion, 2025

Region/ subregion	Carbon in aboveground biomass		Carbon in belowground biomass		Carbon in deadwood		Carbon in litter		Soil organic carbon		Total carbon		
	Total (million tonnes)	Per unit area (tonnes/ha)	Total (million tonnes)	Per unit area (tonnes/ha)	Total (million tonnes)	Per unit area (tonnes/ha)	Total (million tonnes)	Per unit area (tonnes/ha)	Total (million tonnes)	Per unit area (tonnes/ha)	Total (million tonnes)	% of world total carbon stock	Per unit area (tonnes/ha)
Eastern and Southern Africa	10 068	34.0	2 907	9.82	372	1.26	1 007	3.40	13 104	44.3	27 458	4	92.7
Northern Africa	755	19.4	234	6.00	18.2	0.47	134	3.43	950	24.4	2 091	n.s.	53.7
Western and Central Africa	32 163	98.2	10 513	32.1	3 573	10.9	698	2.13	38 081	116	85 028	12	260
Africa	**42 986**	**64.9**	**13 653**	**20.6**	**3 964**	**5.98**	**1 838**	**2.77**	**52 135**	**78.7**	**114 577**	**16**	**173**
East Asia	10 832	38.7	2 841	10.1	1 632	5.82	3 917	14.0	18 434	65.8	37 656	5	134
South and Southeast Asia	19 449	66.3	5 185	17.7	387	1.32	236	0.80	28 229	96.2	53 486	7	182
Western and Central Asia	1 942	34.5	543	9.65	50.4	0.90	322	5.72	3 188	56.7	6 045	1	107
Asia	**32 223**	**51.1**	**8 569**	**13.6**	**2 069**	**3.28**	**4 474**	**7.10**	**49 851**	**79.1**	**97 187**	**14**	**154**
Europe, with data for the Russian Federation subtracted	11 671	56.6	2 735	13.3	872	4.23	2 425	2.34	19 024	18.3	36 727	5	178
Europe	**46 403**	**44.7**	**12 587**	**12.1**	**5 139**	**4.95**	**9 406**	**9.05**	**95 688**	**92.1**	**169 223**	**24**	**163**
Caribbean	442	52.7	115	13.7	41.7	4.96	40.7	4.85	779	92.7	1 419	n.s.	169
Central America	1 473	61.9	401	16.8	106	4.47	21.6	0.91	2 111	88.8	4 112	1	173
North America	37 066	49.8	7 993	10.7	11 093	14.9	21 700	29.2	71 180	95.7	149 031	21	200
North and Central America	**38 981**	**50.2**	**8 509**	**11.0**	**11 241**	**14.5**	**21 762**	**28.0**	**74 069**	**95.4**	**154 562**	**22**	**199**
Oceania	**11 252**	**61.2**	**4 597**	**25.0**	**2 577**	**14.0**	**1 242**	**6.75**	**15 221**	**82.8**	**34 889**	**5**	**190**
South America	**75 310**	**88.7**	**18 012**	**21.2**	**5 302**	**6.25**	**2 375**	**2.80**	**42 472**	**50.1**	**143 471**	**20**	**169**
WORLD	**247 154**	**59.7**	**65 928**	**15.9**	**30 292**	**7.32**	**41 098**	**9.93**	**329 437**	**79.6**	**713 908**	**100**	**172**

Note: n.s. = not significant.

for the following carbon pools: carbon in aboveground and belowground biomass, reported by 215 countries and areas (nearly 100 percent of the global forest area); deadwood carbon (carbon in all non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil), reported by 101 countries and areas (78 percent of the global forest area); litter carbon (carbon in all non-living biomass with a diameter less than the minimum diameter for deadwood), reported by 75 countries and areas (66 percent of the global forest area); and soil organic carbon (carbon in mineral and organic soils, including peat, to a specified depth chosen by the country), reported by 77 countries and areas (70 percent of the global forest area).

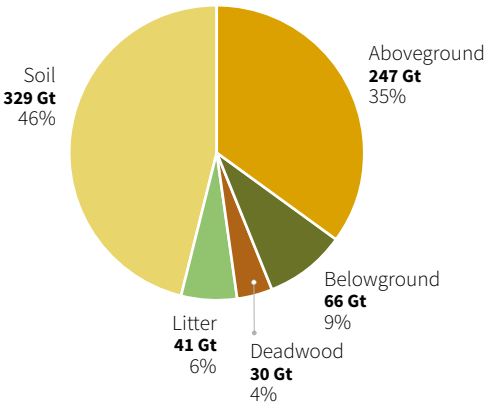
For non-reporting countries and areas, carbon-stock estimates were calculated by multiplying subregional averages for each carbon pool by forest area, with the exception of soil organic carbon, for which estimates were derived from the Global Soil Organic Carbon map. This map, which provides a 1-km soil-carbon grid for a depth of 0–30 cm, was overlayed with available global forest/tree-cover layers that aligned best with reported forest areas to derive country-specific estimates (in preference to using regional averages) (FAO and ITPS, 2020).

Note that soil depth, used by countries and areas to report soil organic carbon estimates, varies geographically. The average forest-area weighted soil depth used for soil organic carbon value globally is 41 cm, with the following regional variations: 30 cm in Asia and Oceania; 32 cm in Europe; 34 cm in South America; 41 cm in Africa; and 70 cm in North and Central America.

The total forest carbon stock in 2025, including all carbon pools, is estimated at 714 Gt, which is equivalent to 172 tonnes per ha (Table 54). This stock is distributed as follows: soil organic carbon, 329 Gt (46 percent of the total), or 79.6 tonnes per ha; aboveground biomass, 247 Gt (35 percent), or 59.7 tonnes per ha; belowground biomass, 65.9 Gt (9 percent), or 15.9 tonnes per ha; litter, 41.1 Gt (6 percent), or 9.93 tonnes per ha; and deadwood, 30.3 Gt (4 percent), or 7.32 tonnes per ha (Figure 26).

The regions with the largest forest carbon stocks are Europe (24 percent of the global total), North and Central America (22 percent) and South America (20 percent) (Figure 27). The carbon stock per unit area is particularly high in Western and Central Africa, at 260 tonnes per ha, and North America, at about 200 tonnes per ha.

FIGURE 26. Total carbon stock, by carbon pool, 2025



TRENDS

Trends in forest carbon stock were assessed using complete time-series data on carbon in forest aboveground and belowground biomass from 210 countries and areas representing 99 percent of the global forest area. Ninety-one countries and areas (77 percent of the global forest area)

FIGURE 27. Forest carbon stock, by region, 2025

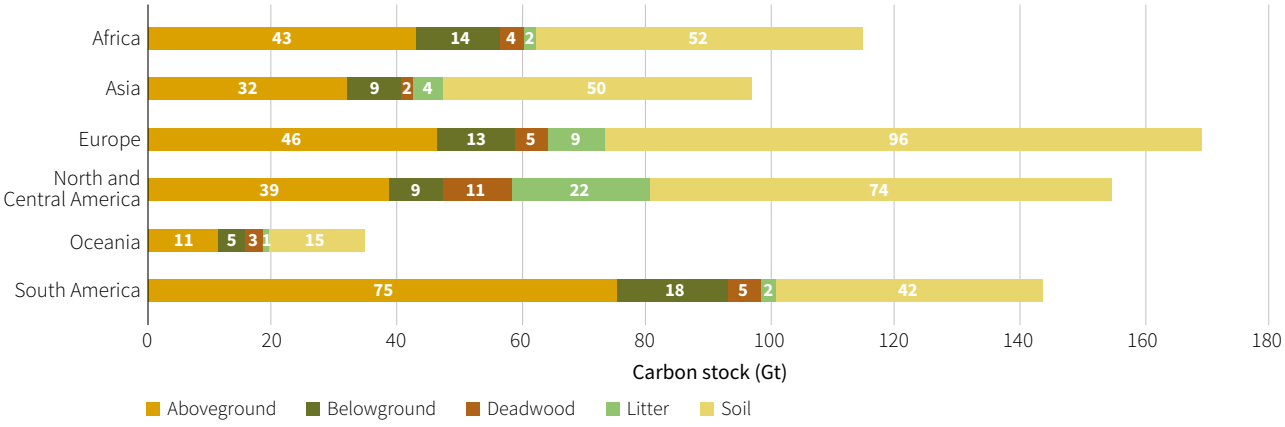
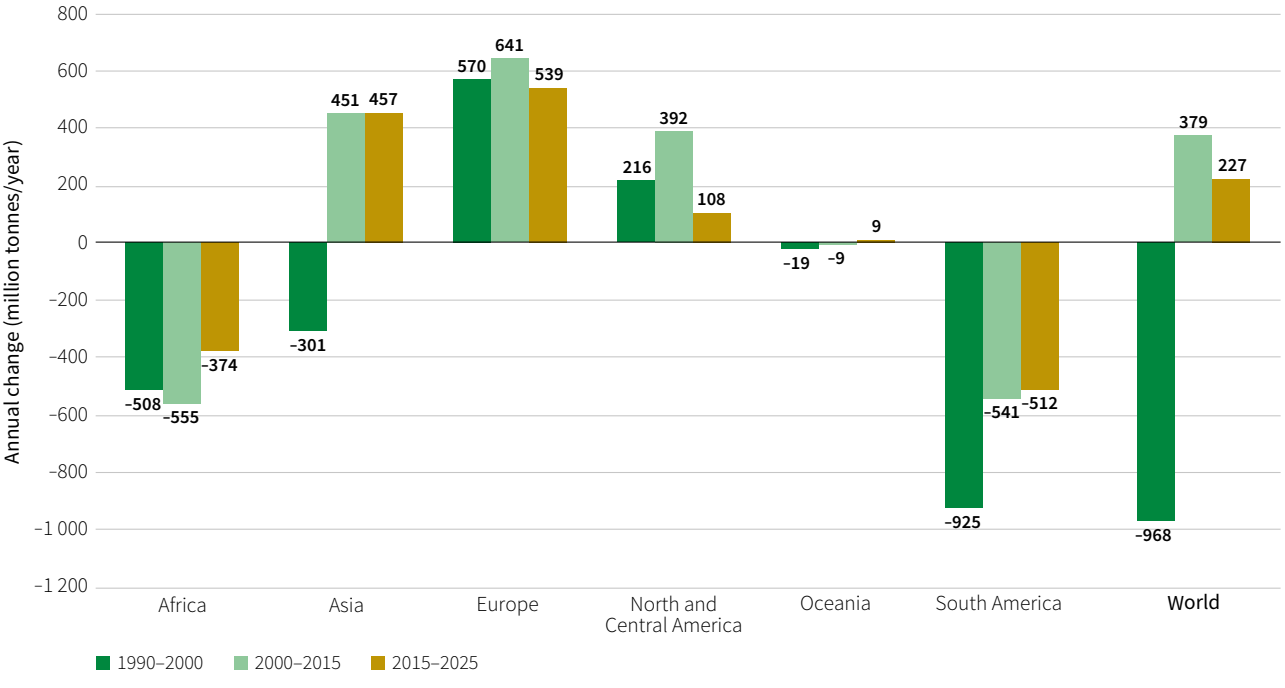


TABLE 55. **Forest carbon stock, by region and subregion, 1990–2025**

Region/subregion	Forest carbon stock (million tonnes)					
	1990	2000	2010	2015	2020	2025
Eastern and Southern Africa	32 738	31 287	29 811	28 949	27 975	27 458
Northern Africa	2 170	2 164	2 149	2 129	2 180	2 091
Western and Central Africa	96 819	93 193	89 682	87 238	86 010	85 028
Africa	**131 727**	**126 644**	**121 642**	**118 316**	**116 165**	**114 577**
East Asia	24 684	27 696	31 368	33 511	35 637	37 656
South and Southeast Asia	58 861	52 613	53 366	53 108	53 729	53 486
Western and Central Asia	5 320	5 543	5 769	5 999	5 999	6 045
Asia	**88 866**	**85 851**	**90 503**	**92 618**	**95 365**	**97 187**
Europe, with data for the Russian Federation subtracted	29 454	31 827	34 200	35 361	36 264	36 727
Europe	**148 514**	**154 214**	**161 043**	**163 830**	**166 595**	**169 223**
Caribbean	1 186	1 253	1 360	1 390	1 415	1 419
Central America	4 844	4 502	4 266	4 278	4 130	4 112
North America	139 421	141 856	146 122	147 817	148 591	149 031
North and Central America	**145 451**	**147 610**	**151 748**	**153 485**	**154 136**	**154 562**
Oceania	**35 118**	**34 929**	**34 676**	**34 800**	**34 800**	**34 889**
South America	**165 957**	**156 708**	**150 264**	**148 588**	**146 134**	**143 471**
WORLD	**715 634**	**705 956**	**709 877**	**711 636**	**713 195**	**713 908**

FIGURE 28. Annual change in forest carbon stock, by region, 1990–2025



provided full time-series data on deadwood carbon. Carbon in litter was reported by 73 countries and areas (65 percent), and soil organic carbon data were available for 74 countries and areas (69 percent).

For incomplete time series, trends in growing stock or carbon in aboveground biomass were used to interpolate missing data for belowground, deadwood and litter carbon. For soil carbon, incomplete time series were extrapolated by repeating the nearest available data point in time. For countries and areas that did not report, carbon stock was estimated by applying the subregional average stock per ha to the forest area at each point in the time series, except for soil organic carbon, for which estimates derived from the Global Soil Organic Carbon Map were applied for all reference years.

The global forest carbon stock decreased between 1990 and 2000, from 716 Gt to 706 Gt, and then increased to 714 Gt in 2025 (Table 55). The increase after 2000 can largely be attributed to an increase in forest area in certain regions, particularly Asia and Europe. The global carbon stock in 2025 is similar to that in 1990, but there are regional and subregional differences. For example, forest carbon stock is significantly higher in 2025 than in 1990 in East Asia, Europe and North America, driven by forest-area expansion, and considerably lower in South America, Africa and Central America (in descending order by rate of change) (Figure 28).

The carbon stock per ha increased across all pools between 1990 and 2025, with the overall forest carbon per unit area growing from 165 tonnes per ha in 1990 to 172 tonnes per ha in 2025, a 5 percent increase.

5 Designation and management

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Forests can be designated for various purposes, from "production" (usually of wood and non-wood products), to biodiversity conservation, to social services. For FRA 2025, countries were asked to report on the status of, and trends in, their forests according to the primary designated management objective – that is, the main intended purpose for which a forest is managed and used. To be considered "primary", the management objective must be significantly more important than other management objectives, and the forest area reported under a given primary management objective may not be reported under any other primary management objective – that is, the designations are mutually exclusive. Note, however, that the primary management objective does not exclude provisions for other benefits or values. For example, sustainably managed natural production forests – for which the primary objective might be wood production – can typically also contribute to the protection of soil and water, biodiversity conservation, and the provision of social services. Similarly, forests managed primarily for the protection of soil and water might also contribute to wood production, biodiversity conservation, and other management objectives.

Six broad management objectives were identified for FRA 2025:

1. **Production** – of timber, fibre, bioenergy and/or non-wood forest products (NWFPs).
2. **Protection of soil and water**.
3. **Conservation of biodiversity** – this category includes but is not limited to areas designated for biodiversity conservation in protected areas.
4. **Social services** – such as recreation, tourism, education, research and the conservation of cultural or spiritual sites.
5. **Multiple use** – a combination of purposes, none of which is significantly more important than another. Thus, a designation of multiple use indicates that the forest is managed for any combination of production, soil and water protection, biodiversity conservation and the provision of social services.
6. **Other** – that is, purposes other than production, the protection of soil and water, biodiversity conservation, social services and multiple use.

Forest area that was not reported under any of these six categories was designated as "unknown".

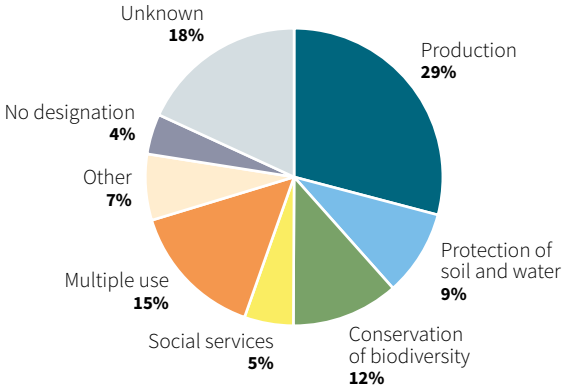
This chapter provides a global overview of the status of forest management designation in all 236 countries and areas covered by the assessment and an analysis of the status of, and trends in, each designation category. Note that values for the primary designated management objectives given in the global overview may differ from those shown in the analysis by designation category, which were calculated for reporting countries only. In the global overview, the values were calculated for total world forest area, with forests in non-reporting countries assigned to the "unknown" primary management objective.

In addition to the primary designated management objective, information was collected on the area of forest in legally established protected areas and under long-term management plans. The area and proportion of forests under formal protection is an indicator of how countries are addressing the need to conserve and protect forest ecosystems and the services those ecosystems provide. In FRA 2025, countries were requested to provide information on the area of forest in legally established protected areas corresponding to International Union for Conservation of Nature protected-area categories I–IV (IUCN, n.d.).

The area and proportion of forests with long-term management plans that are documented and periodically revised is an important indicator of the intention to sustainably manage forest resources. The area of forests in protected areas and the area of forests with long-term management plans are also components of SDG indicator 15.2.1 ("progress towards sustainable forest management"), which is reported annually by FAO to the United Nations Statistics Division.

The Kunming–Montreal Global Biodiversity Framework (CBD, 2022), the SDGs of the 2030 Agenda for Sustainable Development (United Nations General

FIGURE 29. Proportion of total forest area designated for various primary management objectives, 2025



Assembly, 2015), the Global Forest Goals and targets of the UNSPF (United Nations, 2017), and other global processes have highlighted the need for forest restoration efforts to address the extensive deforestation and degradation of critical ecosystems, ensure the continued provision of ecosystem services, mitigate biodiversity loss and increase climate resilience. The United Nations declared 2021–2030 as the Decade on Ecosystem Restoration to halt the degradation of ecosystems and promote their restoration. Therefore, to better understand global forest restoration efforts, FRA 2025 collected data on existing restoration commitments and their underlying legal mandates, national definitions, areas identified as needing forest restoration, restoration targets, and the status of implementation of forest restoration.

Global overview

Analysis of primary designated management objectives for the 236 countries and areas covered by FRA 2025 shows that production has the most coverage, accounting for 29 percent of the total world forest area, followed by multiple use (15 percent), biodiversity conservation (12 percent), the protection of soil and water (9 percent), and the provision of social services (5 percent) (Figure 29). Management for "other" purposes – a category that mainly comprises country-specific management objectives, such as combinations of military, conservation, research, protection (e.g. against industrial or climate-related damage) and development – covers 7 percent of the world forest area. Four percent of the world forest area has no primary designated management objective, and the primary designated management objective is unknown for the remaining 18 percent of the world's forests.

Of the regions, the largest share of forest area designated for production is in Europe, at 53 percent. Europe also reported the lowest share of forest area designated for biodiversity conservation, at 4 percent (Figure 30). If data for the Russian Federation are subtracted, however, the proportion of forest area designated for production in Europe is about 40 percent of the forest area, which is still the highest share among the regions, and the proportion of forest designated for biodiversity conservation is on par with the global average of 12 percent.

Africa has the largest proportion of forest area designated for multiple use and biodiversity conservation, at 40 percent and 20 percent, respectively. The Democratic Republic of the Congo and Zambia reported the region's largest areas of forest designated for biodiversity conservation.

FIGURE 30. Proportion of forest area designated for various primary management objectives, by region, 2025

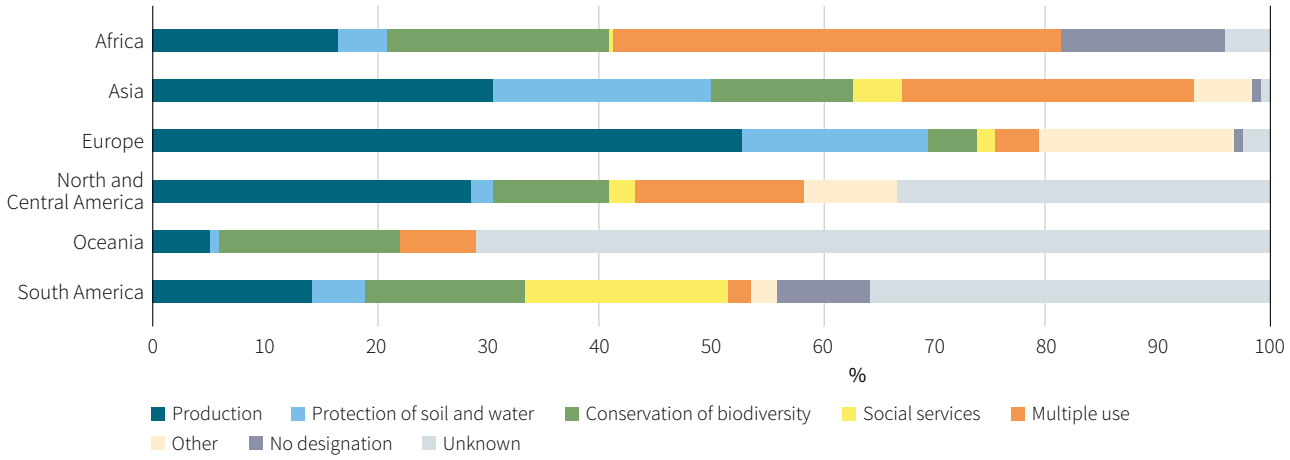


TABLE 56. Forest area designated primarily for production, by region and subregion, 2025

Region/subregion	Data availability		Forest area designated primarily for production	
	No. of reporting countries/areas	% of total forest area	Area (1 000 ha)	% of total forest area
Eastern and Southern Africa	22	95	25 395	9
Northern Africa	8	99	3 534	9
Western and Central Africa	23	99	82 659	25
Africa	**53**	**98**	**111 589**	**17**
East Asia	4	91	77 131	30
South and Southeast Asia	17	99	104 161	36
Western and Central Asia	21	93	10 907	21
Asia	**42**	**95**	**192 200**	**32**
Europe, with data for the Russian Federation subtracted	39	89	82 986	45
Europe	**40**	**98**	**547 958**	**54**
Caribbean	17	63	1 154	22
Central America	6	81	718	4
North America	5	100	219 967	30
North and Central America	**28**	**99**	**221 840**	**29**
Oceania	**21**	**99**	**9 639**	**5**
South America	**13**	**98**	**121 765**	**15**
WORLD	**197**	**98**	**1 204 990**	**30**

Asia has the largest proportion of forest area designated primarily for soil and water protection, at 20 percent of the total forest area, but the predominant management objective in the region is production, at 31 percent; China and Indonesia account for the largest areas in the region designated for both these management objectives. The provision of social services is the main known designated management objective in South America (where the biggest proportion is assigned to "unknown"), at 18 percent, which is also the highest share among the regions of forest area designated primarily for social services. Brazil reported the largest area of forest designated for social services, at almost one-third of the country's total forest area.

Oceania has the highest share of forest in the "unknown" category, due mainly to a lack of data on management objectives for Australia.

TABLE 57. Top ten countries for share of forest area designated primarily for production, 2025

Ranking	Country	Area (1 000 ha)	% of total forest area
1	Democratic People's Republic of Korea	6 762	88
2	Mali	9 080	87
3	Albania	789	84
4	Finland	18 551	82
5	Montenegro	675	82
6	Denmark	522	81
7	Ghana	5 227	74
8	Latvia	2 515	73
9	Sweden	19 401	69
10	Myanmar	18 492	68

Analysis by designation category

PRODUCTION

Status. FRA 2025 received information on the area of forest designated primarily for production in 2025 from 197 countries and areas representing 98 percent of the world's forest area. Globally, the area of forest so designated is estimated at 1.20 billion ha, which is equivalent to 30 percent of the forest area of reporting countries and areas (Table 56). Europe has the largest area of forest in this category, at 548 million ha. If data for the Russian

TABLE 58. Forest area designated primarily for production, and annual change, by region and subregion, 1990–2025

Region/subregion	Data availability		Area (1 000 ha)						Annual change (1 000 ha/year)		
	No. of reporting countries/ areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	22	95	37 780	35 675	33 339	30 000	27 708	25 395	−210	−378	−461
Northern Africa	8	99	3 425	3 435	3 480	3 521	3 529	3 534	1.05	5.75	1.31
Western and Central Africa	21	94	87 920	93 275	72 022	79 133	74 923	73 381	535	−943	−575
Africa	**51**	**95**	**129 125**	**132 386**	**108 841**	**112 655**	**106 161**	**102 310**	**326**	**−1 315**	**−1 034**
East Asia	4	91	90 459	89 870	73 927	77 600	77 469	77 131	−58.9	−818	−46.9
South and Southeast Asia	16	98	132 410	121 515	116 801	110 605	101 697	104 081	−1 089	−727	−652
Western and Central Asia	21	93	9 252	9 889	10 204	10 457	10 676	10 907	63.7	37.9	45.0
Asia	**41**	**95**	**232 121**	**221 274**	**200 933**	**198 663**	**189 842**	**192 120**	**−1 085**	**−1 507**	**−654**
Europe, with data for the Russian Federation subtracted	37	89	90 532	86 866	85 597	83 081	81 819	82 310	−1 085	−252	−77.1
Europe	**38**	**98**	**538 697**	**499 919**	**510 380**	**502 370**	**544 437**	**547 282**	**−3 878**	**163**	**4 491**
Caribbean	17	63	785	901	1 054	1 147	1 175	1 154	11.6	16.4	0.69
Central America	5	68	431	433	600	678	596	659	0.13	16.4	−1.93
North America	4	91	206 880	217 522	227 711	229 509	234 562	219 806	1 064	799	−970
North and Central America	**26**	**90**	**208 096**	**218 855**	**229 365**	**231 334**	**236 332**	**221 618**	**1 076**	**832**	**−972**
Oceania	**21**	**99**	**8 748**	**9 454**	**9 903**	**9 860**	**9 682**	**9 639**	**70.7**	**27.1**	**−22.1**
South America	**11**	**83**	**89 167**	**97 029**	**97 520**	**101 621**	**101 728**	**103 186**	**786**	**306**	**156**
WORLD	**188**	**92**	**1 205 954**	**1 178 917**	**1 156 942**	**1 156 503**	**1 188 183**	**1 176 156**	**−2 704**	**−1 494**	**1 965**

Federation are subtracted, an estimated 83 million ha is designated for production in Europe. The region with the second-largest area of forest designated primarily for production is North and Central America, at 222 million ha (29 percent of the forest area), followed by Asia, at 192 million ha (32 percent).

Six countries and areas reported that 80 percent or more of their forest areas is designated primarily for production; six of the top ten countries and areas for share of forest area designated primarily for production are in Europe (Table 57).

Trends. FRA 2025 received time-series data on the area of forest designated for production from 188 countries and areas representing 92 percent of the world's forest area. The area of forest so designated decreased by 29.8 million ha between 1990 and 2025, with diverse patterns across the analysed periods and among regions (Table 58). The area of forest designated primarily for production decreased by 2.70 million ha per year in 1990–2000 and by 1.49 million ha per year in 2000–2015, before increasing by 1.97 million ha per year in 2015–2025. The shift to an increasing trend was driven mainly by Europe and especially the Russian Federation, which reported an annual increase in the area of forest designated primarily for production of 4.57 million ha in 2015–2025. Overall in Europe, the area of forest so designated decreased from 55 percent to 54 percent between 1990 and 2025. The share of forest designated primarily for production decreased substantially in Asia, from 42 percent in 1990 to 32 percent in 2025. The share decreased slightly in Africa over the period and was steady in Oceania. The proportion of forest designated primarily for production increased in South America over the 35-year period, from 8 percent in 1990 to 11 percent in 2025. North and Central America reported a slight increase since 1990 in the share of forest area designated primarily for production (Figure 31).

MULTIPLE USE

Status. FRA 2025 received information on the area of forest designated primarily for multiple use in 2025 from 175 countries and areas representing 81 percent of the world's forest area. The area so designated is estimated at 617 million ha, which is 18 percent of the total forest area of the reporting countries and areas (Table 59). The largest area of forest designated for multiple use is in Africa, at 263 million ha, which is 43 percent of the forest area of the reporting countries and areas in the region and the biggest share among the regions. Northern Africa has an even larger proportion, at 72 percent, with Libya, Mauritania, Morocco, South Sudan and the Sudan all reporting values for their total forest area designated for multiple use of 72 percent or higher (including 99 percent, for Egypt). Worldwide, 18 countries and areas indicated that 100 percent of their forests is designated for multiple use (Table 60).

Trends. FRA 2025 received time-series data on the area of forest designated for multiple use from 167 countries and areas representing 73 percent of the world's forest area. The area of forest so designated decreased by 97.5 million ha between 1990 and 2025, with the highest rate of decrease occurring in the most recent decade (Table 61). The average annual rate of decrease was 1.36 million ha in 1990–2000, 268 000 ha in 2000–2015 and 7.99 million ha in 2015–2025.

FIGURE 31. Proportion of total forest area designated primarily for production, by region and globally, 1990–2025

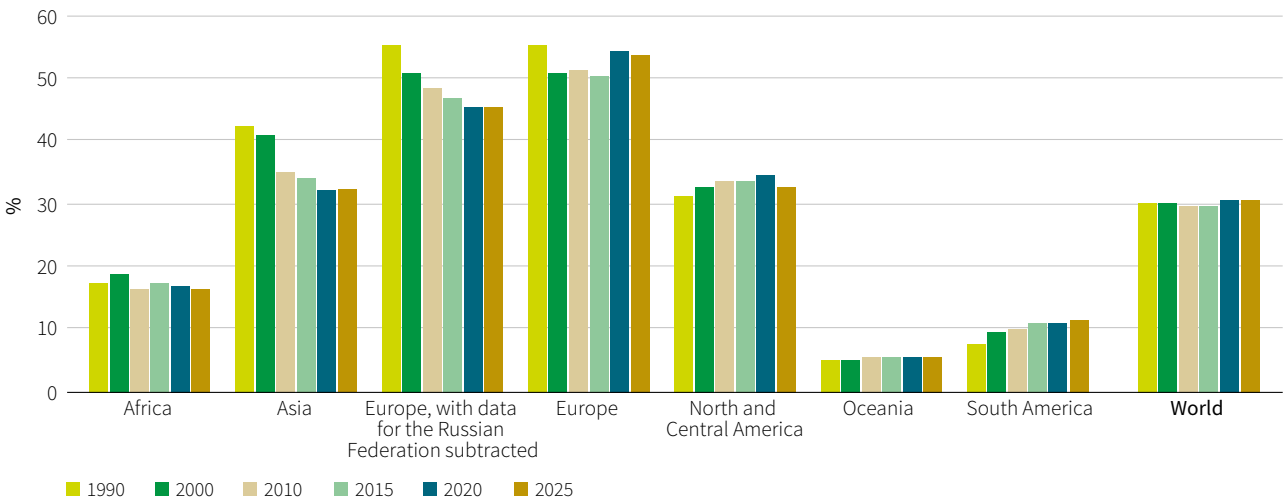


TABLE 59. Forest area designated primarily for multiple use, by region and subregion, 2025

Region/subregion	Data availability		Area (1 000 ha)	% of total forest area
	No. of reporting countries/areas	% of total forest area		
Eastern and Southern Africa	22	95	176 936	63
Northern Africa	8	99	27 589	72
Western and Central Africa	18	90	58 420	20
Africa	**48**	**93**	**262 946**	**43**
East Asia	4	91	80 313	31
South and Southeast Asia	17	99	72 850	25
Western and Central Asia	21	93	12 171	23
Asia	**42**	**95**	**165 334**	**28**
Europe, with data for the Russian Federation subtracted	36	84	37 868	22
Europe	**37**	**97**	**41 507**	**4**
Caribbean	14	57	323	7
Central America	1	13	324	11
North America	5	100	114 912	15
North and Central America	**20**	**97**	**115 560**	**15**
Oceania	**19**	**99**	**12 460**	**7**
South America	**9**	**25**	**18 827**	**9**
WORLD	**175**	**81**	**616 633**	**18**

TABLE 60. Countries and areas with 100 percent of their total forest area designated primarily for multiple use, 2025

Country	Area (1 000 ha)
Botswana	15 730
Djibouti	5.93
Faroe Islands	0.08
France	17 795
French Guyana	7982
Marshall Islands	9.71
Martinique	52.7
Mayotte	9.60
Montserrat	2.42
Niue	18.9
Oman	1.60
Pakistan	3 192
Palau	41.9
Réunion	77.2
Saint Kitts and Nevis	11.0
Saint Pierre and Miquelon	1.10
Saint Vincent and the Grenadines	28.6
Saudi Arabia	2 776

The big decrease in the most recent period was due mainly to Canada, where the area designated for multiple use more than halved, with some forest areas previously in the multiple-use category now designated for biodiversity conservation or other management objectives.

The area of forest designated for multiple use declined between 1990 and 2025 in Africa, North and Central America and Oceania and increased in Asia, Europe and South America (Figure 32). The share in each region was relatively stable over the period except in North and Central America, where it decreased from 27 percent to 17 percent, mainly reflecting the change in Canada (as indicated above).

PROTECTION OF SOIL AND WATER

Status. FRA 2025 received information on the area of forest designated primarily for the protection of soil and water in 2025 from 175 countries and areas representing 90 percent of the world's forest area. The area of forest so designated is estimated at 386 million ha, which is 10 percent of the total forest area of the reporting countries and areas (Table 62). Europe has the largest area of forest designated primarily for soil and water protection, at 173 million ha (17 percent of the region's total forest area), due mainly to the Russian Federation, which, with 153 million ha of forest in this category, accounts for 40 percent of the world total. The

TABLE 61. **Forest area designated primarily for multiple use, and annual change, by region and subregion, 1990–2025**

Region/subregion	Data availability		Area (1 000 ha)						Annual change (1 000 ha/year		
	No. of reporting countries/ areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	22	95	216 623	209 013	198 936	187 830	182 337	176 936	−761	−1 412	−1 089
Northern Africa	8	99	34 454	32 680	30 402	29 423	28 449	27 589	−177	−217	−183
Western and Central Africa	16	47	64 152	58 704	68 849	60 752	57 185	55 077	−545	137	−568
Africa	**46**	**72**	**315 228**	**300 397**	**298 187**	**278 005**	**267 971**	**259 602**	**−1 483**	**−1 493**	**−1 840**
East Asia	3	86	46 438	57 148	68 300	73 415	76 993	80 313	1 071	1 084	690
South and Southeast Asia	17	99	91 765	81 060	78 688	80 049	78 809	72 850	−1 070	−67.4	−720
Western and Central Asia	21	93	9 893	9 721	10 876	11 380	12 082	12 171	−17.1	111	79.0
Asia	**41**	**93**	**148 096**	**147 930**	**157 864**	**164 845**	**167 884**	**165 334**	**−16.6**	**1 128**	**48.9**
Europe, with data for the Russian Federation subtracted	36	84	34 805	35 451	36 386	36 294	37 264	37 868	−16.6	56.2	157
Europe	**37**	**97**	**34 913**	**35 606**	**38 103**	**37 792**	**40 884**	**41 507**	**69.2**	**146**	**372**
Caribbean	14	57	338	334	328	327	325	323	−0.36	−0.51	−0.34
Central America	0	0	–	–	–	–	–	–	–	–	–
North America	4	91	178 020	177 536	177 126	175 486	174 059	113 153	−48.4	−137	−6 233
North and Central America	**18**	**88**	**178 358**	**177 870**	**177 454**	**175 813**	**174 384**	**113 477**	**−48.8**	**−137**	**−6 234**
Oceania	**18**	**99**	**13 756**	**11 504**	**13 522**	**12 190**	**12 406**	**12 432**	**−225**	**45.8**	**24.2**
South America	**7**	**12**	**15 502**	**18 970**	**18 609**	**19 612**	**19 199**	**16 018**	**347**	**42.8**	**−359**
WORLD	**167**	**73**	**705 853**	**692 276**	**703 739**	**688 256**	**682 729**	**608 369**	**−1 358**	**−268**	**−7 989**

FIGURE 32. Proportion of total forest area designated primarily for multiple use, by region and globally, 1990–2025

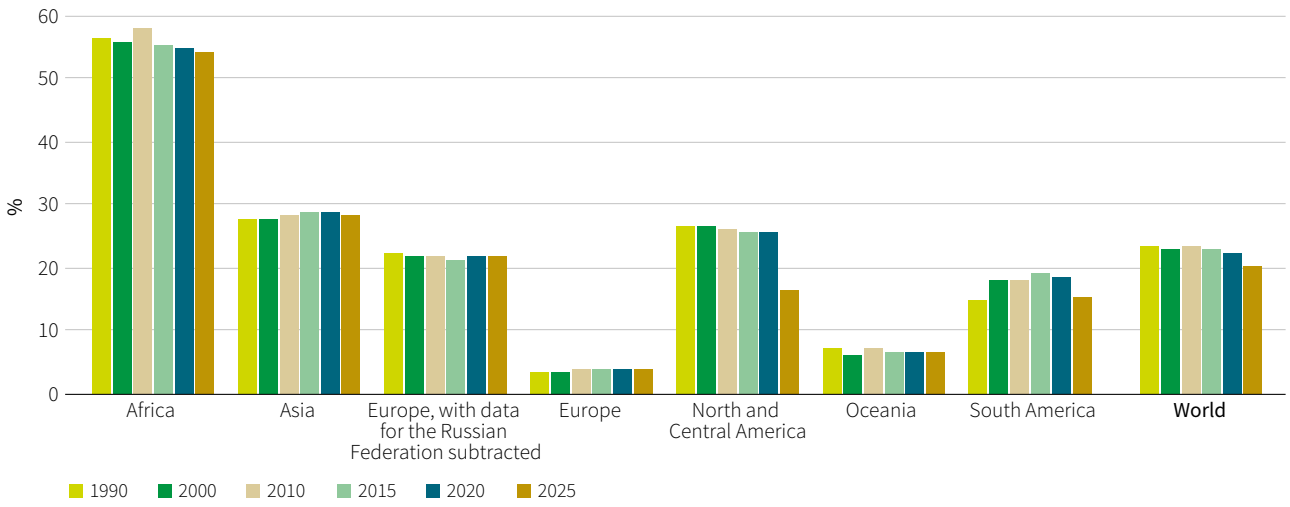


TABLE 62. Forest area designated primarily for soil and water protection, by region and subregion, 2025

Region/subregion	Data availability		Area (1 000 ha)	% of total forest area
	No. of reporting countries/areas	% of total forest area		
Eastern and Southern Africa	20	94	17 288	6
Northern Africa	8	99	1 987	5
Western and Central Africa	18	90	9 178	3
Africa	**46**	**92**	**28 453**	**5**
East Asia	4	91	55 385	22
South and Southeast Asia	16	98	46 870	16
Western and Central Asia	20	93	21 621	41
Asia	**40**	**95**	**123 876**	**21**
Europe, with data for the Russian Federation subtracted	39	89	20 958	11
Europe	**40**	**98**	**173 491**	**17**
Caribbean	13	56	1 945	41
Central America	2	37	591	7
North America	5	100	13 557	2
North and Central America	**20**	**98**	**16 092**	**2**
Oceania	**19**	**27**	**1 797**	**4**
South America	**10**	**84**	**42 348**	**6**
WORLD	**175**	**90**	**386 055**	**10**

TABLE 63. Top ten countries and areas for the proportion of total forest area designated primarily for soil and water protection, 2025

Ranking	Country/area	Area (1 000 ha)	% of total forest area
1	Kiribati	1.07	100
2	Wallis and Futuna Islands	10.0	92
3	Tunisia	623	91
4	Kyrgyzstan	1 095	87
5	Uzbekistan	2 735	70
6	Mongolia	9 199	65
7	Kazakhstan	2 160	61
8	Republic of Moldova	210	57
9	Algeria	933	55
10	Armenia	180	54

second-largest area of forest designated for the protection of soil and water is in Asia, at 124 million ha, which is 21 percent of the forest area of the reporting countries and areas in that region – the largest proportion in this category of any region.

Among the subregions, the Caribbean and Western and Central Asia have the highest share of forest designated primarily for the protection of soil and water, both at 41 percent. In the Caribbean, Cuba reported that more than half (51 percent) of its forest area is designated for this management objective; in Western and Central Asia, Armenia, Kazakhstan, Kyrgyzstan and Uzbekistan reported among the highest shares worldwide of forest designated primarily for the protection of soil and water (54 percent or above) (Table 63). The proportion of the total forest area designated primarily for soil and water protection is higher than 90 percent in three countries and areas – Kiribati, Tunisia, and the Wallis and Futuna Islands.

Trends. FRA 2025 received time-series data on the area of forest designated primarily for soil and water protection from 168 countries and areas representing 85 percent of the world's forest area. The area of forest so designated increased by 123 million ha between 1990 and 2025 (Table 64). The biggest increase was in 2015–2025, at an average annual rate of 6.39 million ha, up from 2.28 million ha per year in 2000–2015 and 2.53 million ha per year in 1990–2000. The steep increase in the decade to 2025 was due mainly to the Russian Federation, where the average annual increase in the area designated primarily for soil and water protection grew from 1.10 million ha in 2000–2015 to 6.53 million ha in 2015–2025.

All regions except Africa and North and Central America reported increases between 1990 and 2025 in the area of forest designated primarily for soil and water protection. In Africa, the relative share of forest for the protection of soil and water increased from 4 percent in 1990 to 5 percent in 2025, despite an absolute decrease in area in this designation category (Figure 33). There was almost no change in Oceania over the 35-year period.

CONSERVATION OF BIODIVERSITY

Status. FRA 2025 received information on the area of forest designated primarily for biodiversity conservation in 2025 from 200 countries and areas representing 98 percent of the world's forest area. The area so designated is estimated at 482 million ha, which is 12 percent of the forest area of the reporting countries and areas (Table 65).

The largest area of forest designated for biodiversity conservation is in Africa, at 130 million ha. This is 20 percent of the forest area of reporting countries and areas in the region, which is the highest proportion among the regions. The lowest proportion is in Europe, at 4 percent (although this increases to 13 percent if data for the Russian Federation are subtracted).

Three countries and areas – Norfolk Island, Saint-Martin (French part) and Tonga – reported that more than 75 percent of their forest area is designated primarily for biodiversity conservation (Table 66).

Trends. FRA 2025 received time-series data on the area of forest designated primarily for biodiversity conservation from 190 countries and areas representing 95 percent of the world's forest area. The area of forest so designated increased by 118 million ha between 1990 and 2025, with the largest increase occurring between 2000 and 2015 (Table 67). The average rate of annual increase grew from 1.79 million ha in 1990–2000 to 4.19 million ha in 2000–2015 before dropping to 3.75 million ha in 2015–2025. Globally, the proportion of forest designated primarily for the conservation of biodiversity increased from 7 percent in 1990 to 12 percent in 2025.

The area of forest designated for biodiversity conservation increased in all regions between 1990 and 2025. It almost doubled in North and Central America over the period and more than doubled (from 18.4 million ha to 43.6 million ha) in Europe (data for the Russian Federation subtracted). There was a significant increase in the proportion of total forest designated for biodiversity conservation in Africa, from 14 percent in 1990 to almost 20 percent in 2025 (Figure 34).

In Asia, the increase in the forest area designated for biodiversity conservation mainly reflects data reported by China, where the area so designated expanded almost

TABLE 64. Forest area designated primarily for soil and water protection, and annual change, by region and subregion, 1990–2025

Region/subregion	Data availability		Area (1 000 ha)						Annual change (1 000 ha/year)		
	No. of reporting countries/ areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	20	94	19 886	19 401	17 832	16 479	17 263	17 288	−48.5	−195	80.9
Northern Africa	8	99	1 631	1 680	1 823	1 912	1 997	1 987	4.94	15.5	7.55
Western and Central Africa	18	90	10 076	9 538	9 041	8 048	8 897	9 178	−53.9	−99.3	113
Africa	**46**	**92**	**31 593**	**30 619**	**28 696**	**26 438**	**28 157**	**28 453**	**−97.4**	**−279**	**201**
East Asia	4	91	29 016	40 317	58 363	56 942	56 232	55 385	1 130	1 108	−156
South and Southeast Asia	16	98	43 714	43 298	47 028	48 758	46 808	46 870	−41.6	364	−189
Western and Central Asia	20	93	22 271	22 678	21 778	21 540	21 164	21 621	40.8	−75.9	8.05
Asia	**40**	**95**	**95 001**	**106 293**	**127 169**	**127 240**	**124 204**	**123 876**	**1 129**	**1 396**	**−336**
Europe, with data for the Russian Federation subtracted	36	84	16 771	19 567	20 657	20 164	20 510	20 650	1 129	39.8	48.6
Europe	**37**	**97**	**75 662**	**90 231**	**106 432**	**107 394**	**172 278**	**173 183**	**1 457**	**1 144**	**6 579**
Caribbean	13	56	1 236	1 432	1 693	1 851	1 899	1 945	19.6	27.9	9.40
Central America	1	25	58	58	396	426	448	463	0	24.5	3.67
North America	4	91	15 579	15 734	15 956	15 986	19 630	13 524	15.5	16.8	−246
North and Central America	**18**	**89**	**16 874**	**17 225**	**18 045**	**18 263**	**21 977**	**15 932**	**35.1**	**69.2**	**−233**
Oceania	**19**	**27**	**1 783**	**1 780**	**1 779**	**1 801**	**1 796**	**1 797**	**−0.25**	**1.34**	**−0.41**
South America	**8**	**69**	**21 660**	**21 762**	**20 791**	**20 945**	**21 054**	**22 721**	**10.2**	**−54.4**	**178**
WORLD	**168**	**85**	**242 572**	**267 911**	**302 913**	**302 082**	**369 467**	**365 961**	**2 534**	**2 278**	**6 388**

FIGURE 33. Proportion of total forest area designated primarily for the protection of soil and water, by region and globally, 1990–2025

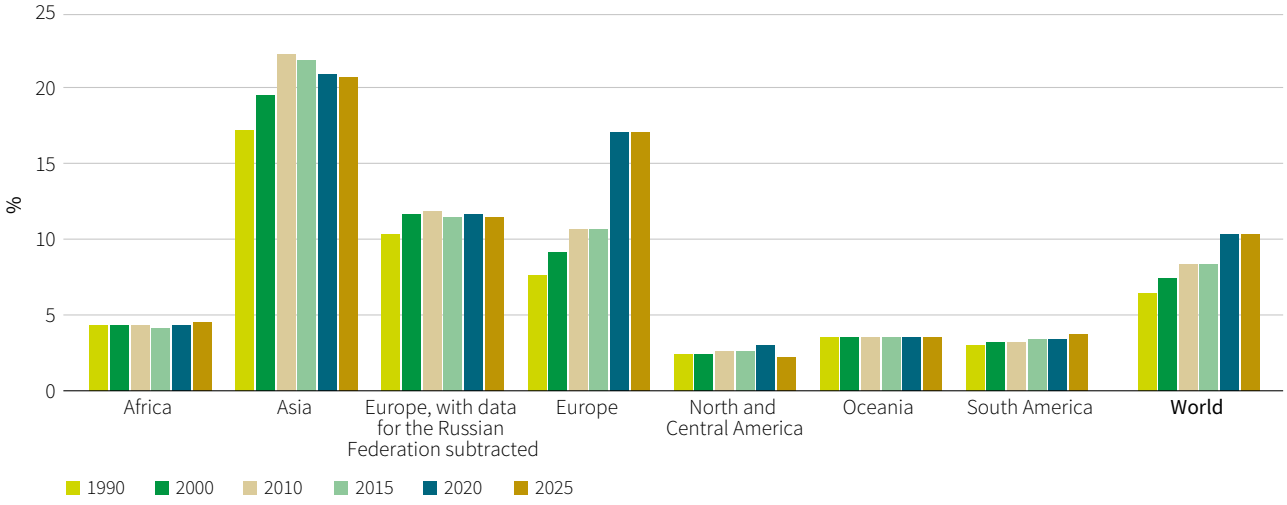


TABLE 65. Forest area designated primarily for biodiversity conservation, by region and subregion, 2025

Region/subregion	Data availability		Area (1 000 ha)	% of total forest area
	No. of reporting countries/areas	% of total forest area		
Eastern and Southern Africa	22	95	61 790	22
Northern Africa	8	99	5 165	13
Western and Central Africa	23	98	63 096	20
Africa	**53**	**97**	**130 050**	**20**
East Asia	4	91	24 923	10
South and Southeast Asia	17	99	49 055	17
Western and Central Asia	23	99	5 503	10
Asia	**44**	**95**	**79 481**	**13**
Europe, with data for the Russian Federation subtracted	38	89	24 615	13
Europe	**39**	**98**	**43 591**	**4**
Caribbean	18	57	773	16
Central America	6	81	5 529	29
North America	5	100	73 592	10
North and Central America	**29**	**99**	**79 894**	**10**
Oceania	**22**	**99**	**29 316**	**16**
South America	**13**	**98**	**119 972**	**14**
WORLD	**200**	**98**	**482 305**	**12**

TABLE 66. Top ten countries and areas for the proportion of total forest area designated primarily for biodiversity conservation, 2025

Ranking	Country/area	Area (1 000 ha)	% of total forest area
1	Tonga	7.17	82
2	Saint–Martin (French Part)	1.00	81
3	Norfolk Island	0.37	76
4	Guinea	3 006	62
5	Nepal	3 514	56
6	Zambia	24 392	54
7	Sao Tome and Principe	29.5	53
8	Guinea–Bissau	1 120	53
9	Netherlands (Kingdom of the)	192	52
10	Guatemala	1 804	51

sevenfold between 1990 and 2025. In South America, the forest area designated for biodiversity conservation decreased by 301 000 ha per year between 1990 and 2000 but then increased by 51 100 ha per year in 2000–2015 and by 397 000 ha per year in 2015–2025. This mainly reflects decreases in the area of forest managed for biodiversity conservation in Brazil in each of the three analysed periods and a significant increase in the Bolivarian Republic of Venezuela in 2015–2025.

SOCIAL SERVICES

Status. FRA 2025 received information on the area of forest designated primarily for social services in 2025 from 170 countries and areas representing 89 percent of the world's forest area. The total area so designated is estimated at 221 million ha – 6 percent of the forest area of the reporting countries and areas (Table 68).

South America has both the largest absolute area of forest designated primarily for social services, at 154 million ha, and by far the largest proportion of total forest area so designated, at 23 percent. This area is composed almost entirely of forests reported by Brazil, at 153 million ha, which is almost one-third of that country's total forest area and 69 percent of the world's forest area designated for social services.

The area designated primarily for social services exceeds 10 percent of the total forest area in ten countries and areas, led by Singapore, at 79 percent of the country's forest area (Table 69).

Trends. FRA 2025 received time-series data on the area of forest designated primarily for social services from 163 countries and areas representing 83 percent of the world's forest area. The area so designated increased by 79.2 million ha between 1990 and 2025, with the highest rate of increase occurring in the most recent decade (Table 70).

The area of forest designated primarily for social services increased in all regions except Europe and Oceania between 1990 and 2025. The increase was particularly evident in percentage terms in South America, where the

FIGURE 34. Proportion of total forest area designated primarily for biodiversity conservation, by region and globally, 1990–2025

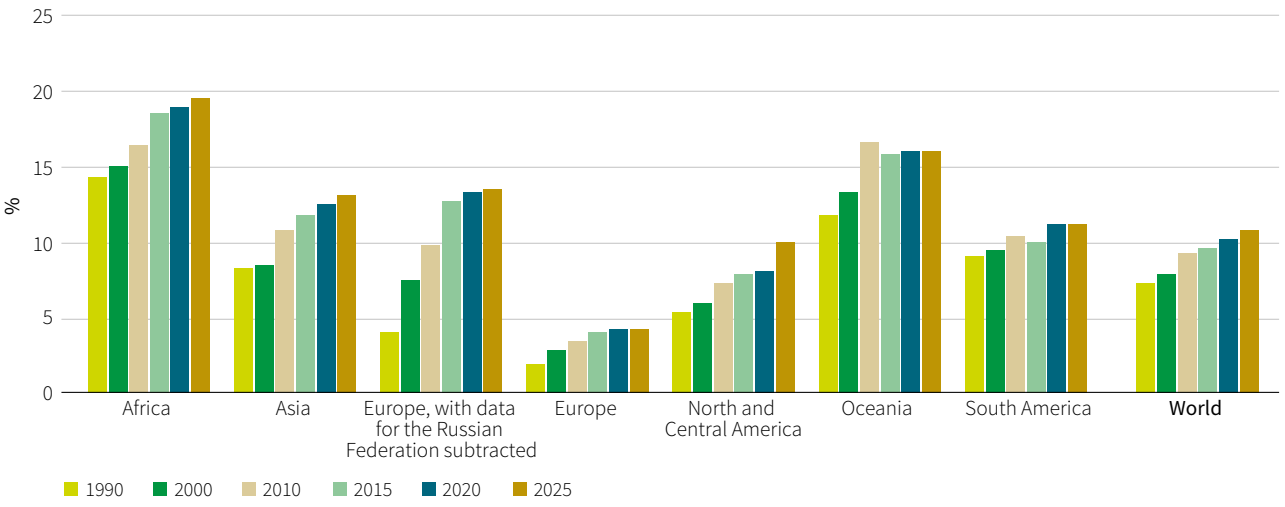


TABLE 67. **Forest area designated primarily for biodiversity conservation, and annual change, by region and subregion, 1990–2025**

Region/subregion	Data availability		Area (1 000 ha)						Annual change (1 000 ha/year)		
	No. of reporting countries/ areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	22	95	54 946	54 408	54 375	61 400	61 353	61 790	–53.8	466	39.0
Northern Africa	8	99	4 876	4 896	5 154	5 155	5 165	5 165	1.96	17.3	0.99
Western and Central Africa	21	92	48 557	50 019	52 226	53 282	54 403	54 929	146	218	165
Africa	**51**	**94**	**108 380**	**109 323**	**111 755**	**119 837**	**120 921**	**121 884**	**94.3**	**701**	**205**
East Asia	4	91	5 413	7 170	12 641	15 257	20 135	24 923	176	539	967
South and Southeast Asia	17	99	37 140	36 356	45 053	47 988	48 729	49 055	–78.4	775	107
Western and Central Asia	23	99	2 907	3 639	4 802	5 235	5 435	5 503	73.3	106	26.8
Asia	**44**	**95**	**45 459**	**47 165**	**62 496**	**68 479**	**74 299**	**79 481**	**171**	**1 421**	**1 100**
Europe, with data for the Russian Federation subtracted	37	89	6 564	12 733	17 523	22 571	23 940	24 608	171	656	204
Europe	**38**	**98**	**18 418**	**28 987**	**35 232**	**40 753**	**42 821**	**43 585**	**1 057**	**784**	**283**
Caribbean	17	57	543	613	709	768	785	773	7.08	10.3	0.51
Central America	1	15	2 464	2 184	1 932	1 896	1 804	1 804	–28.0	–19.2	–9.18
North America	5	100	36 987	42 243	52 575	56 381	59 023	73 592	526	943	1 721
North and Central America	**23**	**97**	**39 994**	**45 040**	**55 216**	**59 045**	**61 612**	**76 168**	**505**	**934**	**1 712**
Oceania	**22**	**99**	**21 584**	**24 228**	**30 029**	**28 749**	**29 264**	**29 316**	**264**	**301**	**56.8**
South America	**12**	**90**	**87 651**	**84 637**	**88 331**	**85 403**	**90 987**	**89 376**	**–301**	**51.1**	**397**
WORLD	**190**	**95**	**321 485**	**339 380**	**383 059**	**402 267**	**419 905**	**439 809**	**1 789**	**4 192**	**3 754**

TABLE 68. Forest area designated primarily for social services, by region and subregion, 2025

Region/subregion	Data availability		Area (1 000 ha)	% of total forest area
	No. of reporting countries/areas	% of total forest area		
Eastern and Southern Africa	20	94	23	n.s.
Northern Africa	8	99	168	n.s.
Western and Central Africa	16	89	4 251	1
Africa	**44**	**92**	**4 441**	**1**
East Asia	4	91	8 229	3
South and Southeast Asia	16	98	15 570	5
Western and Central Asia	21	93	1 905	4
Asia	**41**	**95**	**25 704**	**4**
Europe, with data for the Russian Federation subtracted	38	89	5 274	3
Europe	**39**	**98**	**19 168**	**2**
Caribbean	13	56	22	n.s.
Central America	2	27	1	n.s.
North America	5	100	17 964	2
North and Central America	**20**	**97**	**17 988**	**2**
Oceania	**17**	**26**	**0**	**0**
South America	**9**	**77**	**153 505**	**23**
WORLD	**170**	**89**	**220 806**	**6**

Note: n.s. = not significant.

TABLE 69. Top ten countries for the proportion of total forest area designated primarily for social services, 2025

Ranking	Country/area	Area (1 000 ha)	% of total forest area
1	Singapore	12.5	79
2	Brazil	153 459	32
3	Republic of Moldova	84.8	23
4	Senegal	1665	19
5	Indonesia	15407	16
6	Ukraine	1450	14
7	Belarus	1290	14
8	Brunei Darussalam	50.8	13
9	Georgia	348	11
10	Iceland	7.07	11

area doubled from 13 percent of the total forest area in 1990 to 26 percent in 2025, and in Asia, where the share increased from 1 percent to 4 percent (Figure 35). The 17 countries and areas in Oceania that reported on this aspect all indicated that no forest is designated primarily for social services.

Forest in protected areas

Status. FRA 2025 received information on the area of forest in legally protected areas in 2025 from 215 countries and areas accounting for nearly 100 percent of the world's forest area. The total area of forest in protected areas is estimated at 813 million ha, which is 20 percent of the global forest area (Table 71). Figure 36 provides a global overview of the share of forest in protected areas.

Among the regions, the largest area of forest in protected areas is in Europe, at 235 million ha, which is 23 percent of the region's forest area. The proportion of forest area in protected areas is highest in Asia, at 26 percent (Figure 37), due mostly to Indonesia, which has the world's second-largest area of legally protected forest (after the Russian Federation), and China. Four countries and areas reported that 90 percent or more of their forest area is in legally established protected areas (Table 72).

TABLE 70. **Forest area designated primarily for social services, and annual change, by region and subregion, 1990–2025**

Region/subregion	Data availability		Area (1 000 ha)						Annual change (1 000 ha/year)		
	No. of reporting countries/ areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	20	94	19	20	21	22	23	23	0.09	0.15	0.03
Northern Africa	8	99	3	3	165	166	168	168	0.00	10.9	0.18
Western and Central Africa	15	47	3 286	3 156	3 059	2 998	3 687	4 251	–13.0	–10.5	125
Africa	**43**	**71**	**3 308**	**3 179**	**3 244**	**3 187**	**3 878**	**4 441**	**–12.9**	**0.54**	**125**
East Asia	4	91	1 078	1 583	2 679	3 151	5 693	8 229	50.5	105	508
South and Southeast Asia	15	96	159	161	162	161	13 799	15 568	0.22	–0.01	1 541
Western and Central Asia	21	93	2 471	1 808	1 784	1 828	1 864	1 905	–66.3	1.34	7.73
Asia	**40**	**94**	**3 708**	**3 552**	**4 625**	**5 139**	**21 357**	**25 702**	**–15.6**	**106**	**2 056**
Europe, with data for the Russian Federation subtracted	36	84	6 924	5 714	5 470	5 541	5 225	5 228	–15.6	–11.6	–31.3
Europe	**37**	**97**	**24 358**	**17 092**	**17 934**	**1 7983**	**19 049**	**19 122**	**–727**	**59.4**	**114**
Caribbean	13	56	13	15	21	22	22	22	0.14	0.47	0.06
Central America	0	0	–	–	–	–	–	–	–	–	–
North America	5	100	15 194	15 247	15 474	15 593	18 945	17 964	5.29	23.1	237
North and Central America	**18**	**96**	**15 207**	**15 261**	**15 494**	**15 614**	**18 967**	**17 987**	**5.43**	**23.5**	**237**
Oceania	**17**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
South America	**8**	**69**	**95 000**	**111 727**	**126 639**	**140 332**	**143 365**	**153 505**	**1 673**	**1 907**	**1 317**
WORLD	**163**	**83**	**141 581**	**150 811**	**167 936**	**182 254**	**206 615**	**220 757**	**923**	**2 096**	**3 850**

FIGURE 35. Proportion of total forest area designated primarily for social services, by region and globally, 1990–2025

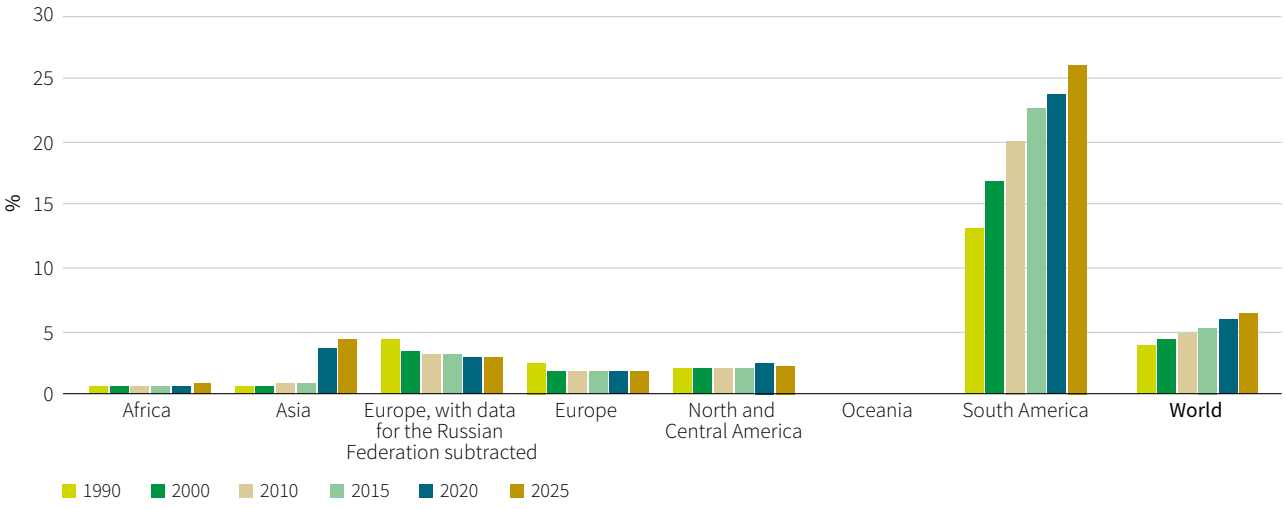
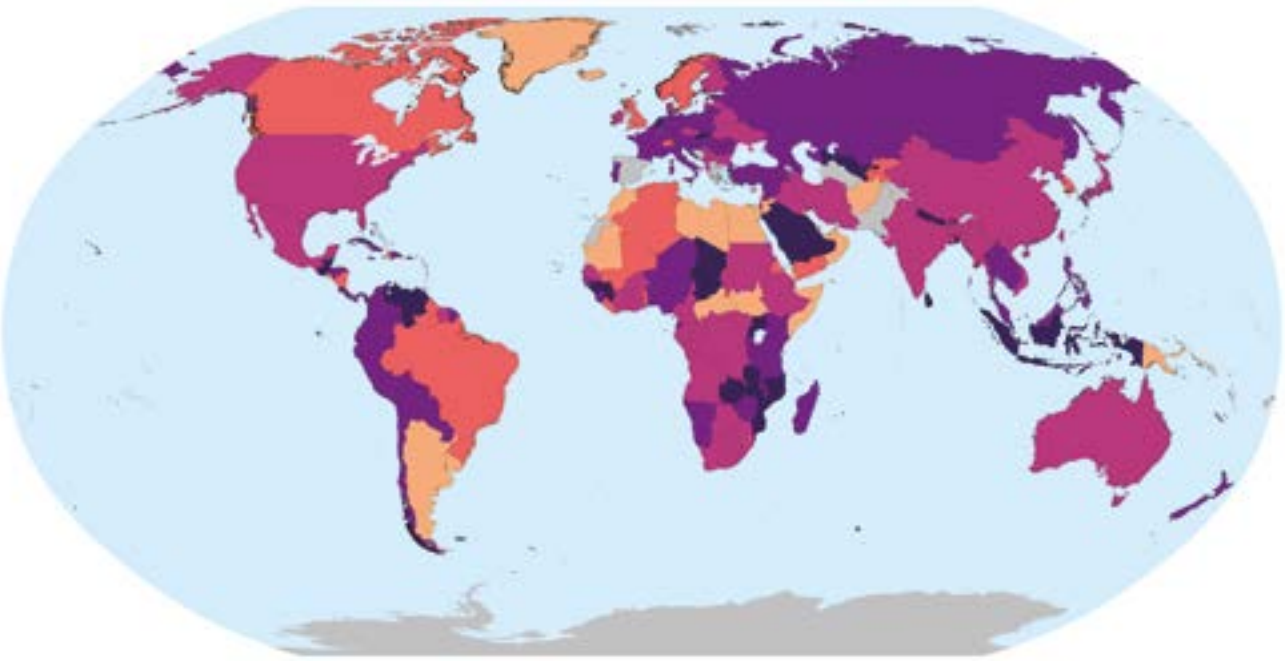


FIGURE 36. Forest area in protected areas as a share of total forest area, by country and area, 2025



Proportion of forest in protected areas (%): 0–5 6–10 11–20 21–50 51–100 No data

Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

TABLE 71. **Forest area in protected areas, by region and subregion, 2025**

Region/subregion	Data availability		Area (1 000 ha)	% of total forest area
	No. of reporting countries/areas	% of total forest area		
Eastern and Southern Africa	23	100	100 383	34
Northern Africa	8	99	3 453	9
Western and Central Africa	25	100	50 257	15
Africa	**56**	**100**	**154 093**	**23**
East Asia	5	100	39 381	14
South and Southeast Asia	17	99	100 984	35
Western and Central Asia	22	95	19 031	36
Asia	**44**	**99**	**159 397**	**26**
Europe, with data for the Russian Federation subtracted	41	96	42 965	22
Europe	**42**	**99**	**235 279**	**23**
Caribbean	26	100	2 461	29
Central America	7	100	8 517	36
North America	5	100	76 044	10
North and Central America	**38**	**100**	**87 022**	**11**
Oceania	**21**	**100**	**29 182**	**16**
South America	**14**	**100**	**147 981**	**17**
WORLD	**215**	**100**	**812 953**	**20**

FIGURE 37. Proportion of forest in legally established protected areas, by region, 2025

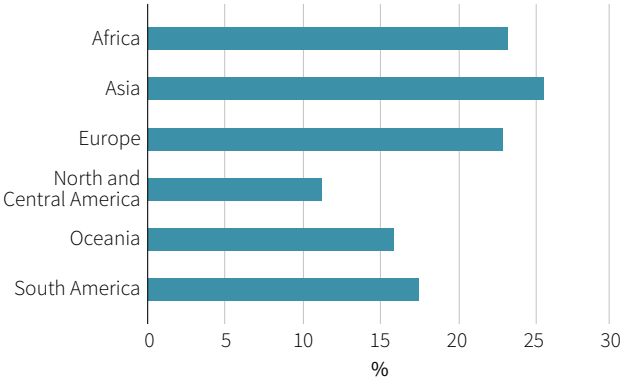


TABLE 72. **Top ten countries and areas for the proportion of total forest area in protected areas, 2025**

Ranking	Country/area	% of total forest area	Area (1 000 ha)
1	Norfolk Island	100	0.49
2	Saudi Arabia	100	2 776
3	Cook Islands	96	14.9
4	Uzbekistan	91	3 540
5	Faroe Islands	88	0.07
6	Zambia	84	37 773
7	Venezuela (Bolivarian Republic of)	80	37 500
8	Réunion	72	55.5
9	Sri Lanka	69	1 458
10	Pitcairn	67	2.46

Trends. FRA 2025 received time-series data on the area of forest in protected areas from 188 countries and areas accounting for 94 percent of the global forest area. The area so designated increased by 251 million ha between 1990 and 2025, although the average annual rate of increase more than halved between 2000–2015 and 2015–2025, from 9.99 million ha to 4.11 million ha (Table 73). The area of forest in legally protected areas increased in all regions between 1990 and 2025 – it almost doubled in North and Central America, mainly because of increases reported by Canada and the United States of America, and in South America (Figure 38). The proportion of forest in legally protected areas increased

FIGURE 38. Proportion of total forest area in protected areas, by region and globally, 1990–2025

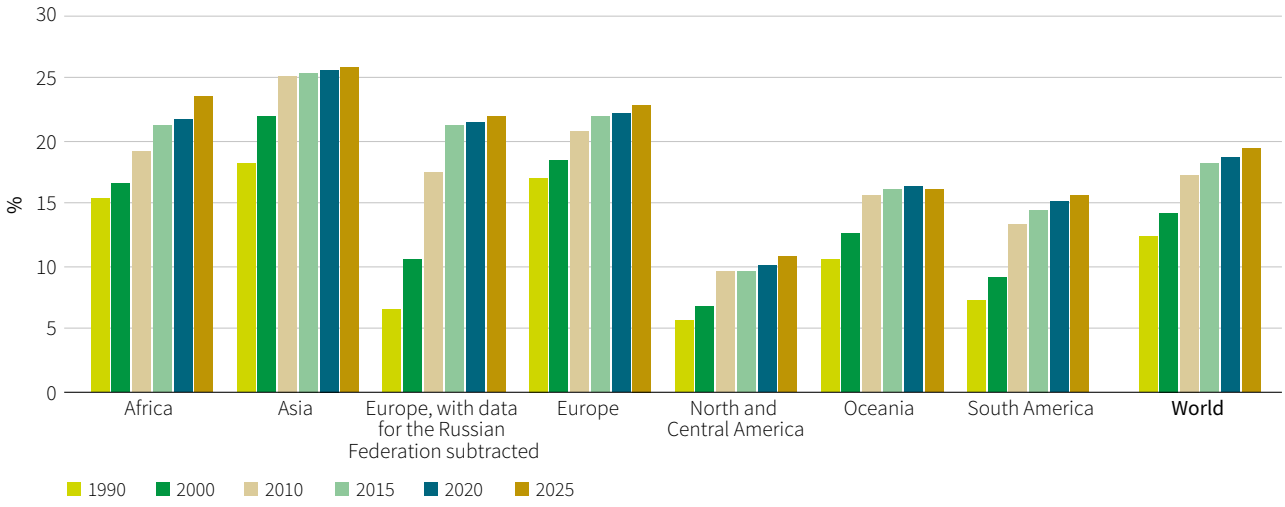
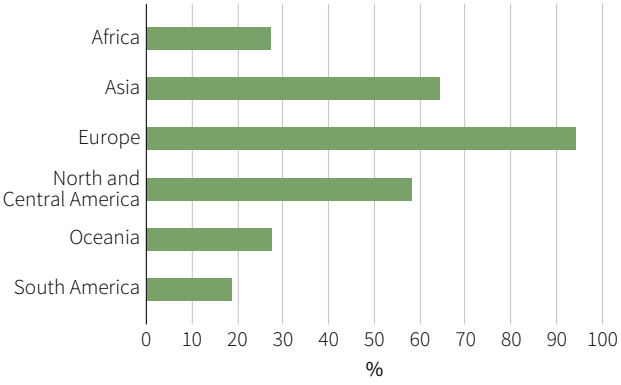


FIGURE 39. Proportion of forest area with long-term management plans, by region, 2025



threefold (from 7 percent to 22 percent) in Europe (Russian Federation subtracted) between 1990 and 2025.

FOREST AREA WITH LONG-TERM MANAGEMENT PLANS

Status. FRA 2025 received information on the area of forest subject to long-term management plans in 2025 from 149 countries and areas representing 93 percent of the world's forest area. More than 2 billion ha of forest is subject to management plans in those countries and areas (about 55 percent of the total forest area of reporting countries and areas), but with considerable differences between regions (Table 74). Almost half (46 percent) of the total forest area with long-term management plans is in Europe and particularly in the Russian Federation. Europe also has the highest share of forest area with long-term management plans, at 94 percent, and South America has the lowest share, at 19 percent (Figure 39).

Trends. FRA 2025 received information on trends in forest area with long-term management plans from 124 countries and areas representing 88 percent of the world's forest area. According to these data, the area of forest subject to management plans increased by 365 million ha between 1990 and 2025 (Table 75).

Forest restoration

FRA 2025 collected data on the forest restoration commitments of countries and areas and their underlying legal mandates, as well as on national definitions, areas identified as in need of forest restoration, restoration targets, and the status of implementation of forest restoration.

Analysis of the submitted data shows a complex picture of commitments, forest restoration targets and achievements. Forest restoration commitments were indicated by 153 countries and areas representing 94 percent of the global forest area. Of these, 128 – representing 90 percent of the global forest area – reported that they have legislative frameworks in place to support forest restoration; thus, the majority of forest restoration commitments is backed by legal mandates. Nevertheless, 28 countries and areas that have made commitments on forest restoration lack a formal legal basis for forest restoration, and many of these countries and areas indicated that they rely on donor-supported projects or community-driven strategies.

TABLE 73. **Forest area in protected areas, and annual change, by region and subregion, 1990–2025**

Region/subregion	Data availability		Area (1 000 ha)						Annual change (1 000 ha/year)		
	No. of reporting countries/ areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	22	100	85 429	84 486	85 798	92 217	93 323	100 380	−94.2	515	816
Northern Africa	8	99	2710	2 730	3 442	3 443	3 453	3 453	1.96	47.6	1.00
Western and Central Africa	24	98	31 349	35 144	45 358	48 743	48 919	49 916	379	907	117
Africa	**54**	**99**	**119 488**	**122 360**	**134 599**	**144 403**	**145 695**	**153 749**	**287**	**1 470**	**935**
East Asia	4	91	5 831	20 091	31 245	32 978	34735	34 822	1 426	859	184
South and Southeast Asia	16	99	81 398	84 867	97 442	98 334	99 720	100 639	347	898	230
Western and Central Asia	22	95	13 202	14 473	16 019	16 957	17 629	19 031	127	166	207
Asia	**42**	**95**	**100 431**	**119 431**	**144 705**	**148 268**	**152 084**	**154 492**	**1 900**	**1 923**	**622**
Europe, with data for the Russian Federation subtracted	33	78	9 508	15 978	27 453	33 317	34 292	35 097	647	1 156	178
Europe	**34**	**96**	**163 548**	**178 376**	**202 781**	**213 714**	**218 951**	**227 411**	**1 483**	**2 356**	**1 370**
Caribbean	23	99	1 463	1 527	1 708	1 781	2 441	2 444	6.36	17.0	66.3
Central America	2	20	3 206	2 926	2 688	2 658	2 603	2 603	−28.0	−17.8	−5.49
North America	5	100	37 322	47 056	68 139	69 319	71 794	76 044	973	1 484	672
North and Central America	**30**	**98**	**41 991**	**51 508**	**72 535**	**73 759**	**76 839**	**81 091**	**952**	**1 483**	**733**
Oceania	**17**	**98**	**19 199**	**22 643**	**27 635**	**28 878**	**29 109**	**29 109**	**344**	**416**	**23.1**
South America	**11**	**84**	**62 746**	**72 704**	**101 617**	**107 925**	**110 386**	**112 217**	**996**	**2 348**	**429**
WORLD	**188**	**94**	**507 403**	**567 022**	**683 873**	**716 946**	**733 064**	**758 069**	**5 962**	**9 995**	**4 112**

TABLE 74. Forest area with long-term management plans, by region and subregion, 2025

Region/subregion	Data availability		Area (1 000 ha)	% of total forest area
	No. of reporting countries/areas	% of total forest area		
Eastern and Southern Africa	13	62	65 222	36
Northern Africa	5	80	5 986	19
Western and Central Africa	19	97	73 725	23
Africa	**37**	**80**	**144 933**	**27**
East Asia	4	97	201 296	74
South and Southeast Asia	9	84	130 043	52
Western and Central Asia	12	84	34 497	73
Asia	**25**	**90**	**365 835**	**64**
Europe, with data for the Russian Federation subtracted	40	96	138 896	67
Europe	**41**	**99**	**971 526**	**94**
Caribbean	10	54	2 464	55
Central America	6	94	3 281	15
North America	5	100	443 621	60
North and Central America	**21**	**99**	**449 366**	**58**
Oceania	**12**	**97**	**49 670**	**28**
South America	**13**	**92**	**147 956**	**19**
WORLD	**149**	**93**	**2 129 285**	**55**

NATIONAL DEFINITIONS OF FOREST RESTORATION

Fifty-five countries and areas covering 62 percent of the global forest area indicated that they have national definitions of forest restoration. The most common words in the provided national definitions are linked to activities and objectives associated with different types of forest restoration. Terms include ecological restoration, reforestation, regeneration, improving forest functionality, afforestation, structural gains, natural regeneration, rehabilitation and increasing forest cover. Definitions also refer to promoting human well-being, species reproduction, protection, ecosystem services, economic benefits, goods, native species recovery, landscape management, long-term restoration efforts, forest management, enhancing forest biomass and maintaining forest integrity.

The lack of international definitions for forest restoration and forest degradation hampers the reliable measurement and analysis of forest restoration. Further complications arise from the differing geographical, economic, social and environmental contexts in which the terms are applied.

RESTORATION TARGETS AND ACHIEVEMENTS

Ninety-one countries and areas representing 69 percent of the global forest area collectively reported forest restoration pledges of more than 190 million ha (Table 76).[14] Of these 91 countries and areas, 55 reported achievements in forest restoration linked to their pledges; 36 countries and areas – which, combined, pledged more than 69 million ha for forest restoration – did not report quantified progress.

The actual restored forest area in 2025, reported by 70 countries and areas representing 42 percent (1.75 billion ha) of the global forest area, is estimated at 44 million ha, amounting to 23 percent of the 190 million ha pledged.

The implementation rate of forest restoration commitments varies significantly among regions, reflecting differences in forest restoration targets, their timing, and the progress made in implementation. Note, however, that the data presented here should be viewed with caution because they may not be representative for all regions.

[14] The figures presented here are based on data reported to FRA 2025 and may differ from restoration commitments and reporting under the Global Biodiversity Framework, the Land Degradation Neutrality, the Paris Agreement and other reporting frameworks.

TABLE 75. **Forest area with long-term management plans, and annual change, by region and subregion, 1990–2025**

Region/subregion	Data availability		Area (1 000 ha)						Annual change (1 000 ha/year)		
	No. of reporting countries/ areas	% of total forest area	1990	2000	2010	2015	2020	2025	1990–2000	2000–2015	2015–2025
Eastern and Southern Africa	11	61	41 467	41 278	44 724	52 500	59 274	65 217	-18.9	748	1 272
Northern Africa	5	80	2 452	3 279	4 893	5 462	5 686	5 986	82.7	146	52.4
Western and Central Africa	15	92	31 008	28 923	42 620	53 588	60 002	71 870	-208	1 644	1 828
Africa	**31**	**78**	**74 927**	**73 480**	**92 236**	**111 550**	**124 962**	**143 073**	**-145**	**2 538**	**3 152**
East Asia	4	97	121 609	140 231	162 691	179 091	195 441	201 296	1 862	2 591	2 220
South and Southeast Asia	9	84	78 012	119 293	124 984	127 543	135 203	130 043	4 128	550	250
Western and Central Asia	10	78	28 445	29 416	30 529	32 058	33 405	34 067	97.2	176	201
Asia	**23**	**90**	**228 066**	**288 941**	**318 204**	**338 692**	**364 049**	**365 405**	**6 087**	**3 317**	**2 671**
Europe, with data for the Russian Federation subtracted	33	79	120 082	122 910	120 992	123 985	128 014	129 193	283	71.7	521
Europe	**34**	**96**	**931 723**	**935 355**	**942 494**	**947 191**	**956 447**	**961 823**	**363**	**789**	**1 463**
Caribbean	8	53	1 355	1 467	1 968	2 145	2 755	2 458	11.2	45.2	31.3
Central America	1	15	4.20	513	513	513	513	513	50.9	0	0
North America	5	100	413 606	423 805	437 578	446 027	443 622	443 621	1 020	1 481	-241
North and Central America	**14**	**97**	**414 965**	**425 784**	**440 059**	**448 685**	**446 889**	**446 592**	**1 082**	**1 527**	**-209**
Oceania	**10**	**24**	**11 423**	**12 070**	**12 483**	**12 415**	**12 478**	**12 478**	**64.7**	**23.0**	**6.30**
South America	**12**	**90**	**50 165**	**65 175**	**125 017**	**133 915**	**141 023**	**146 676**	**1 501**	**4 583**	**1 276**
WORLD	**124**	**88**	**1 711 269**	**1 800 805**	**1 930 493**	**1 992 449**	**2 045 848**	**2 076 047**	**8 954**	**12 776**	**8 360**

TABLE 76. Overview of restoration commitments, and forest area restored, by region, 2025

Region	Area committed (1 000 ha)	Area restored (1 000 ha)	Percentage of area committed that has been restored
Africa	92 497	7 910	8.55
Asia	73 476	31 015	42.2
Europe[a]	3 536	2 093	59.2
North and Central America	6 835	1 861	27.2
Oceania[b]	18.0	18.0	99.1
South America	14 114	1 086	7.70
Total	**190 475**	**43 984**	**23.1**

Notes: [a] The Russian Federation reported 1.7 million ha of implemented forest restoration between 2018 and 2021, which exceeded the original restoration target of 1.55 million ha by 2024. The Russian Federation also reported implemented forest restoration of more than 18 million ha between 1990 and 2020. The figures reported here include only forest restoration that took place after 2018. [b] The results for Oceania reflect only figures reported by Fiji, New Caledonia and Samoa.

TIMELINE OF RESTORATION COMMITMENTS

Forty-nine countries and areas reported forest restoration targets for 2030, in alignment with targets of the Kunming–Montreal Global Biodiversity Framework and the United Nations Decade on Ecosystem Restoration 2021–2030. This temporal concentration reflects a global consensus on the urgency of forest restoration and encompasses about 177 million ha pledged, of which an estimated 27 million ha has been restored.

Four countries and areas indicated longer-term restoration commitments (e.g. to 2045 and 2050), but most countries and areas reported forest restoration goals between 2020 and 2030. Eleven countries reported area-based restoration targets without indicating a year for their achievement.

6 Ownership and management rights

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Clear and secure forest ownership and management rights are important for encouraging public and private investment in forests and for alleviating the poverty of people who depend directly and indirectly on forests for their livelihoods. Accurate information on these, therefore, is crucial for SFM and human well-being and for the formulation of effective forest policies on this aspect of forest management.

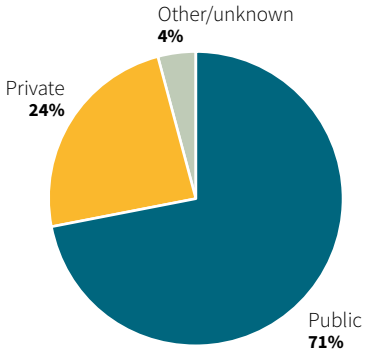
FRA 2025 collected information on ownership and management rights for 1990, 2000, 2010, 2015 and 2020; 2020, therefore, is the reference year for status analysis. Four main forest ownership categories were assessed: 1) public; 2) private; 3) other; and 4) unknown (because of their small size, the latter two are combined – as "other/unknown" – in the data presented here). The "private" category has three subcategories: 1) forest owned by individuals; 2) forest owned by private business entities or institutions; and 3) forest owned by Indigenous Peoples and local communities.

FRA 2025 also collected information on who holds management rights in public forests, defined as the right to manage and use publicly owned forests for a specified period. Five main categories of management rights-holders were identified: 1) public administrations; 2) private business entities and institutions; 3) Indigenous Peoples and local communities; 4) other; and 5) unknown (because of their small size, the latter two are combined – as "other/unknown" – in the data presented here).

Global overview

FRA 2025 received data on (or, for desk studies, made estimates of, based on available information) forest ownership in 2020 for all 236 countries and areas included in the assessment. Analysis of these data indicates that 71 percent of the world's forests were publicly owned in 2020; private ownership accounted for another 24 percent; and the remainder (4 percent) was categorized as other/unknown (mainly comprising mixed or undeclared ownership) (Figure 40).

FIGURE 40. Proportion of total forest area, by three ownership categories, 2020



Note: "Other" applies mainly to forest areas with mixed or disputed/undeclared ownership or with ownership in transition.

Public was the predominant ownership category in all regions, although private ownership has the lion's share in Europe (accounting for 53 percent of the region's forest area) if data for the Russian Federation are subtracted. Public ownership applied to almost the entire forest area (98 percent) in Western and Central Asia in 2020 and to 94 percent of the forest area in Western and Central Africa and 85 percent in South and Southeast Asia (Table 77; Figure 41). The highest share of private ownership was in Oceania, at 47 percent, followed by East Asia and North America, both at 35 percent. The ownership of 69 percent of the forest area in Central America was other/unknown.

Ninety countries and areas – of which 71 are in Africa and Asia – reported that more than 90 percent of their forests was publicly owned in 2020. Five countries and areas (all in Oceania) reported that the entirety of their forest area was privately owned (Table 78).

Globally, the share of total forest area designated as other/unknown decreased between 1990 and 2020, indicating increased clarity on ownership. The shares increased slightly for both public and private ownership over the period.

TABLE 77. Forest ownership, by region and subregion, 2020

Region/subregion	Area privately owned (1 000 ha)	% of total forest area	Area publicly owned (1 000 ha)	% of total forest area	Area of other/unknown ownership (1 000 ha)	% of total forest area
Eastern and Southern Africa	41 823	14	210 542	69	51 381	17
Northern Africa	8 296	21	31 001	78	545	1
Western and Central Africa	11 725	4	314 523	94	7 024	2
Africa	**61 844**	**9**	**556 066**	**82**	**58 951**	**9**
East Asia	95 657	35	176 507	65	0	0
South and Southeast Asia	44 228	15	251 952	85	222	n.s.
Western and Central Asia	834	2	54 530	98	0	0
Asia	**140 719**	**23**	**482 989**	**77**	**222**	**n.s.**
Europe, with data for the Russian Federation subtracted	107 891	53	87 971	43	8 806	4
Europe	**107 891**	**10**	**916 403**	**89**	**8 806**	**1**
Caribbean	993	12	4 982	60	2 380	28
Central America	3 541	15	4 006	17	16 694	69
North America	259 077	35	466 045	63	19 906	3
North and Central America	**263 611**	**34**	**475 033**	**61**	**38 981**	**5**
Oceania	**85 597**	**47**	**97 057**	**53**	**648**	**n.s.**
South America	**294 980**	**34**	**503 654**	**58**	**71 791**	**8**
WORLD	**1 062 533**	**24**	**3 119 173**	**71**	**188 204**	**4**

Note: n.s.= not significant.

TABLE 78. Top ten countries and areas for proportion of privately owned forest, 2020

Ranking	Country/area	% of total forest area that is privately owned
1	American Samoa	100
2	Cook Islands	100
3	Marshall Islands	100
4	Vanuatu	100
5	Wallis and Futuna Islands	100
6	Papua New Guinea	99.9
7	Niue	99.7
8	Uruguay	99.3
9	Yemen	95.0
10	Portugal	92.8

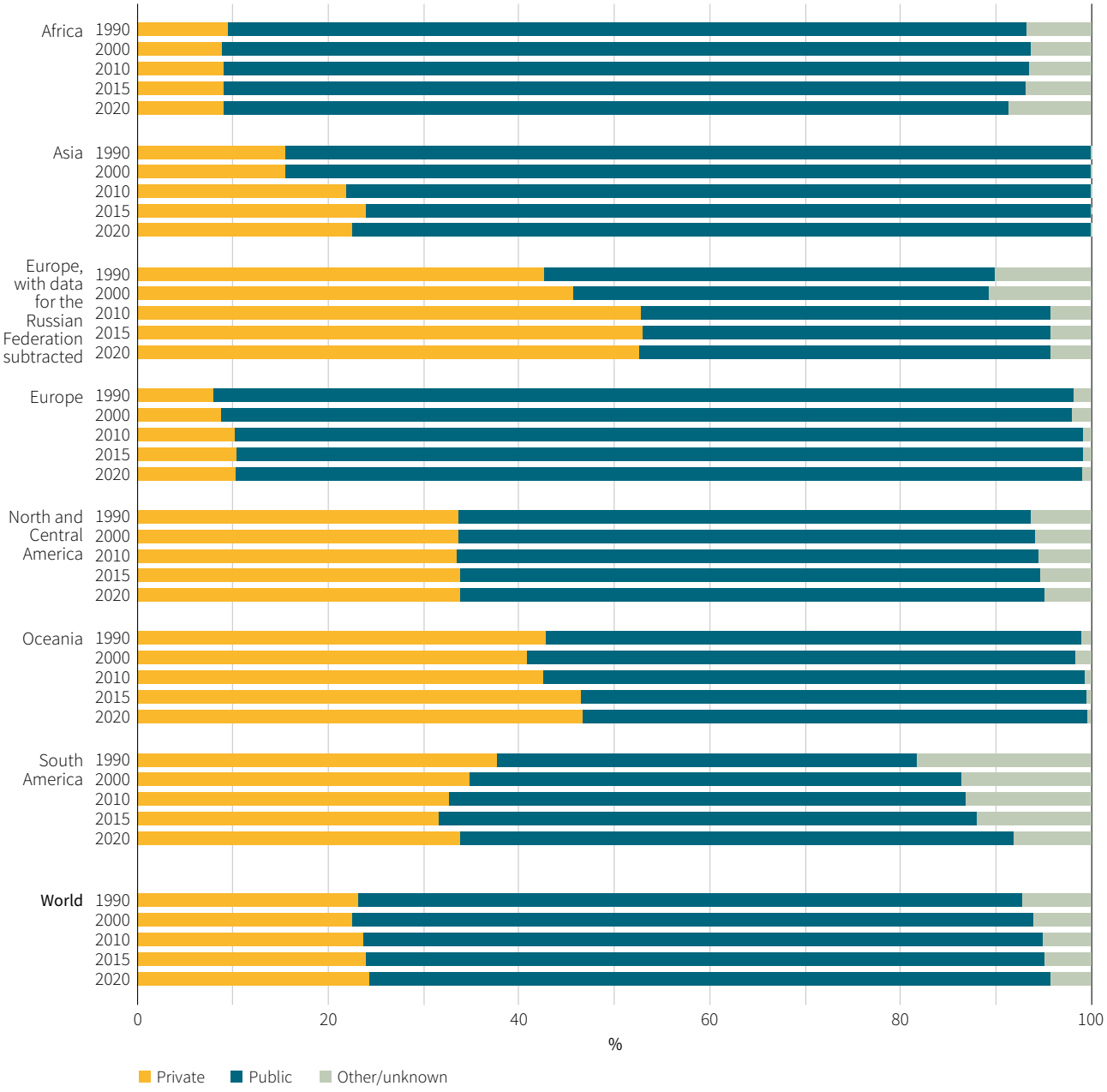
Differing trends are evident regionally: for example, the share of publicly owned forest decreased over the period in Africa, Asia, Europe and Oceania and increased in North and Central America and (by more) in South America. The share of privately owned forest decreased in South America, from 38 percent in 1990 to 34 percent in 2020, due mainly to Brazil, where the area of private forest decreased from 365 million ha to 227 million ha over the period. The share of private forest increased in Asia, from 16 percent in 1990 to 23 percent in 2020, mainly reflecting an increase in China, where the area of private forest grew from 27.5 million ha in 1990 to 76.9 million ha in 2020. The share of privately owned forest also increased in Europe and Oceania and was relatively steady in Africa and North and Central America. The other/unknown ownership category decreased over the period in all regions except Africa (mainly because of large areas of unknown ownership reported in Eastern and Southern Africa).

Private ownership, by type of owner

STATUS

FRA 2025 received information on the area of forest owned by subcategories of private owner in 2020 from 140 countries and areas representing 55 percent of the world's forest

FIGURE 41. Proportion of forest area, by ownership type and region, and globally, 1990–2020



area; given this relatively low proportion of representation, findings may not be representative at the global level. Reporting was particularly low in Oceania and South America, and it was not possible to derive trends for these two regions. The analysis reported here is based on a subset of countries and areas that reported on all three subcategories of private forest ownership; those that reported on only one or two of the subcategories were excluded.

Of the total area of privately owned forest in 2020, 48 percent was owned by individuals, 30 percent was owned by Indigenous Peoples and local communities, and 23 percent was owned by private business entities and institutions (Table 79). Ownership by individuals was predominant in Europe (where it represented 79 percent of the total forest area owned privately), Asia (58 percent) and North and Central America (52 percent). Indigenous Peoples

and local communities owned 33 percent of the private forest in Africa, 23 percent in Asia, 18 percent in North and Central America and 5 percent in Europe.

Although, as noted, insufficient data were available to derive regional findings for Oceania and South America, it is worth noting that Indigenous Peoples and local communities owned 100 percent of the private forest in Guyana (corresponding to 14 percent of the country's forest area) in 2020, 91 percent in Ecuador (11 percent of the forest area) and 87 percent in Peru (37 percent of the forest area). Oceania, Niue, Papua New Guinea, Vanuatu and the Wallis and Futuna Islands reported that 100 percent of their forest areas was owned by Indigenous Peoples and local communities.

Indigenous Peoples and local communities owned 41.6 million ha in North and Central America (18 percent of the privately owned forest area) in 2020. If data reported by Canada on the area of forest owned by Indigenous Peoples and local communities are included (Canada did not report on all three subcategories of private ownership and therefore was not included in the global analysis), the share of forest owned by Indigenous Peoples and local communities in North and Central America increases to 49.3 million ha (19 percent of the private forest area).

The largest share of privately owned forest held by private business entities and institutions in 2020 was in Africa, at 32 percent, followed by North and Central America, at 29 percent.

TRENDS

FRA 2025 received complete time-series data on the area of forest in the three categories of private ownership from 131 countries and areas representing 52 percent of the world's forests. Globally, the proportion of forest owned by individuals declined between 1990 and 2020, from 53 percent to 49 percent. The share of forest area owned by Indigenous Peoples and local communities also decreased slightly over the period, from 27 percent to 26 percent, and the area owned by private business entities and institutions increased from 20 percent to 24 percent (Figure 42).

The decrease in the share of forest area owned by individuals was particularly evident in North and Central America, where it dropped from 59 percent in 1990 to 52 percent in 2020; there was a slight decrease in Africa and Asia and the share was steady in Europe (at 79 percent). Insufficient data were available for South America and Oceania to derive statistically significant trends in those two regions.

The share of forest area owned by Indigenous Peoples and local communities decreased in North and Central America, from 19 percent in 1990 to 18 percent in 2020. It was steady in Africa and Asia, at 33 percent and 26 percent, respectively, and increased slightly in Europe, from 3 percent to 4 percent.

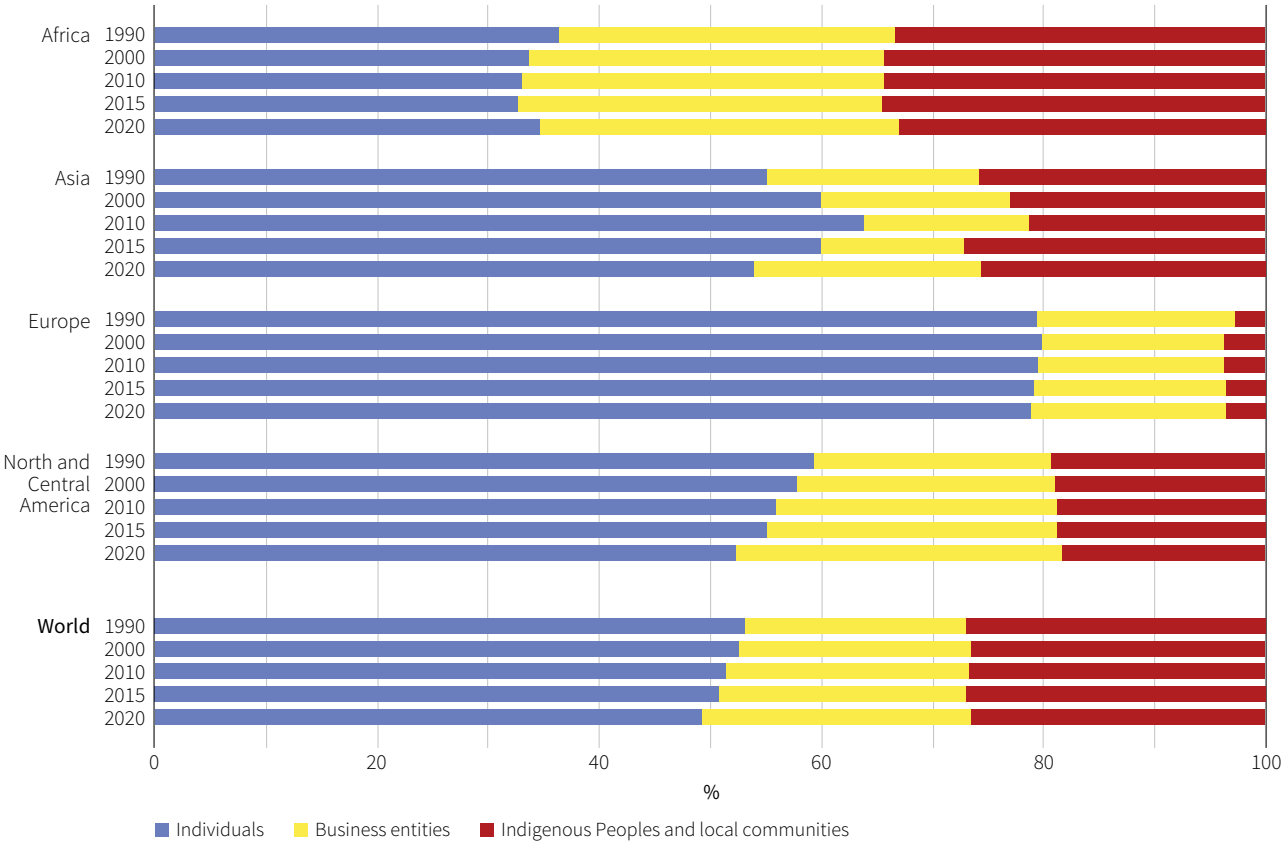
The global increase in the proportion of forests owned by private business entities and institutions was reflected in North and Central America, where it increased from 21 percent in 1990 to 29 percent in 2020. The share of forests owned by private business entities and institutions also increased in Africa over the period, from 30 percent to 32 percent, and in Asia, from 19 percent to 20 percent. The share of private forest owned by private business entities and institutions was stable in Europe between 1990 and 2020, at 18 percent.

TABLE 79. Forest area in three types of private ownership, by region, 2020

Region	Data availability		Private forest ownership					
			Individuals		Private business entities and institutions		Indigenous Peoples and local communities	
	No. of reporting countries/ areas	% of total forest area	Area (1 000 ha)	%	Area (1 000 ha)	%	Area (1 000 ha)	%
Africa	41	78	18 292	35	17 031	32	17 501	33
Asia	40	33	11 472	58	3 853	19	4 619	23
Europe	32	95	65 140	79	13 990	17	3 783	5
North and Central America	12	49	118 715	52	66 907	29	41 565	18
Oceania	10	21	66.9	n.s.	0	0	37 942	100
South America	5	17	3 413	10	616	2	30 090	88
WORLD	**140**	**55**	**217 098**	**48**	**102 397**	**23**	**135 501**	**30**

Note: n.s. = not significant.

FIGURE 42. Proportion of privately owned forest by ownership type, by region and globally, 1990–2020



Holders of management rights in publicly owned forests

STATUS

FRA 2025 received information on the holders of management rights in public forests in 2020 from 182 countries and areas accounting for 94 percent of the global forest area.

Public administrations held 79 percent of management rights in publicly owned forests worldwide in 2020, private business entities and institutions held 16 percent, and Indigenous Peoples and local communities held 3 percent (Table 80). The remaining 2 percent was reported as other/unknown (mainly composed of mixed holders).

Public administrations were the predominant holders of management rights in publicly owned forests in all regions except Oceania, where they represented 37 percent of all such holders. The largest share of management rights in public forests held by public administrations was in Africa, at 91 percent, followed by South America, at 89 percent (Figure 43).

Private business entities and institutions held 50 percent of the management rights in publicly owned forests in Oceania in 2020, which was the highest share among the regions. The lowest share held by private business entities and institutions was in Africa, at 3 percent. Indigenous Peoples and local communities held 13 percent of management rights in publicly owned forests in Oceania in 2020, which was the largest share among the regions. Indigenous Peoples and local communities held management rights to about 2.38 million ha of publicly owned forest in Europe, which was 0.26 percent of the forest area in that region.

TRENDS

FRA 2025 received time-series data on the allocation of management rights in public forests from 170 countries and areas representing 87 percent of the global forest area. The proportion held by public administrations decreased globally from 94 percent in 1990 to 81 percent in 2020. The share held by private business entities and institutions increased from 4 percent to 15 percent over the period, and the share held by Indigenous Peoples and

FIGURE 43. Proportion of publicly owned forest area, by holder of management rights and region, 2020

TABLE 80. Holders of management rights to public forests, by region, 2020

Region	Data availability		Management rights					
			Public administrations		Private business entities and institutions		Indigenous Peoples and local communities	
	No. of reporting countries/ areas	% of total forest area	Area (1 000 ha)	%	Area (1 000 ha)	%	Area (1 000 ha)	%
Africa	48	91	495 443	91	18 909	3	30 169	6
Asia	44	96	391 315	85	31 159	7	34 536	7
Europe	41	98	671 922	74	235 487	26	2 383	n.s.
North and Central America	19	89	310 562	66	125 803	27	15 253	3
Oceania	18	100	36 189	37	48 112	50	12 724	13
South America	12	93	449 185	89	21 336	4	8 188	2
WORLD	**182**	**94**	**2 354 616**	**79**	**480 806**	**16**	**103 253**	**3**

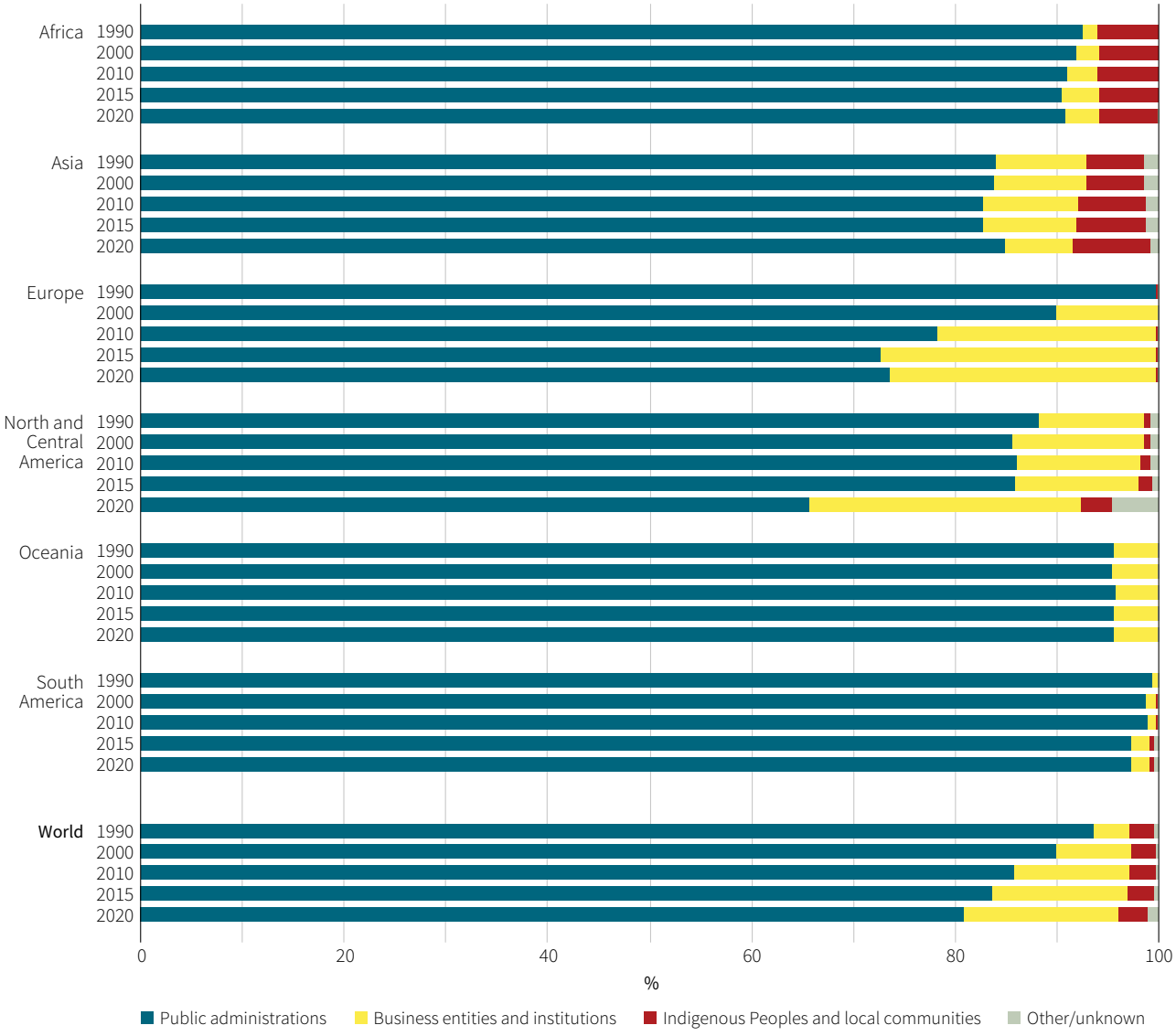
Note: n.s. = not significant.

local communities increased from 2 percent to 3 percent (Figure 44).

The global decrease in the proportion of management rights to publicly owned forest held by public administrations was reflected in all regions except Asia, where it increased from 84 percent in 1990 to 85 percent in 2020, and in Oceania, where it was steady at 96 percent. The decrease in the share of publicly owned forest managed by public administrations was most evident in Europe and North and Central America, where it dropped from 100 percent to 74 percent and from 88 percent to 66 percent, respectively, between 1990 and 2020.

The global increase in the proportion of management rights to publicly owned forest held by private business entities and institutions was reflected in all regions except Asia, where the share declined from 9 percent in 1990 to 7 percent in 2020, and Oceania, where it was steady, at 4 percent. The biggest increase in the share of management rights held by private business entities and institutions was in Europe, where it grew from zero in 1990 to 26 percent in 2020. This shift was due largely to the Russian Federation, where the area of publicly owned forest managed by the private sector increased from zero in 1990 to 235 million ha in 2020. The proportion of management rights to publicly owned forests held by private business entities and institutions also increased substantially in North and Central America, from 10 percent in 1990 to 27 percent in 2020. This was

FIGURE 44. Proportion of publicly owned forests, by holder of management rights, by region and globally, 1990–2020



due mainly to data reported by Canada, where the area more than doubled, from 48.0 million ha in 1990 to 126 million ha in 2020.

The share of publicly owned forest managed by Indigenous Peoples and local communities increased most in North and Central America over the period, from 1 percent in 1990 to 3 percent in 2020. There was also a slight increase in the proportion of public forest managed by Indigenous Peoples and local communities in Asia, from 6 percent in 1990 to 7 percent in 2020. This was due mainly to Indonesia and Mongolia, where the area of public forest managed by Indigenous Peoples and local communities increased from zero in 1990 to 4.39 million ha in 2020 in Indonesia and from zero to 3.52 million ha in Mongolia. In the other regions, the proportion of publicly owned forest for which Indigenous Peoples and local communities held management rights was steady between 1990 and 2020.

7 Disturbances

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Forests are subject to many disturbances that can adversely affect their health and vitality, reduce their capacity to provide a full range of goods and ecosystem services, and cause tree mortality. For FRA 2025, countries and areas were requested to report on the forest area damaged annually in 2000–2023, with damage defined as any biotic or abiotic factor adversely affecting the vigour and productivity of the forest that is not a direct result of human activities. Specifically, countries and areas were asked to report on the area of forest affected by insects, diseases (caused by bacteria, fungi, phytoplasma or viruses), severe weather events (e.g. snow, storms and drought) and other disturbances (mainly composed of any combination of biotic, abiotic, endogenous and biotic/anthropogenic factors). Reporting on the various categories of damage reflects the predominant cause of the damage; therefore, the areas reported are exclusive. For specific years, only the additional area of forest affected in that year was reported (and not the cumulative total).

In some regions, the reporting was significantly incomplete in terms of damage categories (e.g. some reports included data for one category of disturbance and not others) and the years covered. To ensure that the analysis was based on the most representative data, 2020 was chosen as a baseline for assessing the status of damage and 2002–2020 was used for the trend analysis. Given the patchy data, it was not possible to estimate the total forest area affected by disturbances globally.

In addition to the damage categories listed above, this chapter includes analyses of forest fire (specifically on the total land area and forest area affected by fire) and forest degradation.

Insects

STATUS

Sixty countries and areas representing 49 percent of the world's forest area reported on the area of forest affected by insects in 2020. The total area affected was 31.4 million ha, which was about 2 percent of the total forest area of the reporting countries and areas (Table 81). The most comprehensive reporting was in North and Central America (98 percent of the region's forest area), followed by Europe (96 percent) and Asia (47 percent). Reporting was very low in Africa, Oceania and South America. The region with the largest forest area affected by insects in 2020 was North and Central America, at 21.2 million ha, followed by Asia, at 8.40 million ha. In both regions, close to 3 percent of the total forest area of the reporting countries was affected by insects.

A large proportion of the forest area affected by insects in North and Central America was reported by Canada, at 17.8 million ha (84 percent of the regional total). According to Canada's country report, defoliation is mapped on the basis of insect species, and a given area may be affected by more than one species at a time; therefore, there might be double or triple counting of areas affected by more than one species, exaggerating the extent of the total area affected. The United States of America reported a very small area of forest affected by insects in 2020 (compared with previous and subsequent years) and indicated that the decrease was due mostly to a lack of measurement data and might not reflect trends in forest damage. As a result, the estimated area of forest affected by insects in North and Central America should be viewed with caution.

An estimated 1.77 million ha of forest was disturbed by insects in Europe in 2020, which was 0.2 percent of the forest area of the reporting countries and areas.

TRENDS

Given the low reporting and limited representativeness of the sample, the analysis of trends given here is based on annual data for 2002–2020 (the period for which most data were available). Forty-five countries and areas representing 47 percent of the world's forest area reported complete time-series data for the forest area disturbed annually by insects in this period.

The average annual area affected by insects over the period was 34.1 million ha (Table 82). The lowest area

TABLE 81. Forest area affected by insects, by region, 2020

Region	Data availability		Forest area affected by insects	
	No. of reporting countries/areas	% of total forest area	Area (1 000 ha)	% of total forest area
Africa	5	1	119	1.4
Asia	10	47	8 397	2.9
Europe	30	96	1 772	0.2
North and Central America	9	98	21 152	2.8
Oceania	5	n.s.	0.58	2.0
South America	1		0	
WORLD	**60**	**49**	**31 441**	**1.5**

Note: n.s. = not significant.

TABLE 82. Forest area affected annually by insects, by region, 2002–2020

Region	Data availability		Forest area affected annually (1 000 ha/year)		
	No. of reporting countries/areas	% of forest area	Minimum	Maximum	Average
Africa	3	1	84.2	329	176
Asia	8	46	7 382	9 476	8 535
Europe	23	88	479	1 427	816
North and Central America	7	98	15 986	34 499	24 545
Oceania	3	n.s.	0	0	0
South America	1		0	0	0
WORLD	**45**	**47**	**25 360**	**43 945**	**34 072**

Note: n.s. = not significant.

affected in any given year was 25.4 million ha in 2011 and the highest was 43.9 million ha in 2019.

In the analysed period, reporting was highest in North and Central America (with reporting countries and areas representing 98 percent of the region's total forest area), followed by Europe (88 percent) and Asia (46 percent). Africa, Oceania and South America had the lowest reporting, with about 1 percent or less of the total forest area represented in those regions.

Of the three regions with the most comprehensive reporting, there was greatest variability in the area affected by insects in Europe. There, an average of 816 000 ha was affected annually, but this ranged from 479 000 ha in 2008 to 1.43 million ha in 2004 (the latter was due mainly to data reported by Germany, Hungary and the Russian Federation). The average area affected by insects in the period in North and Central America was 24.5 million ha per year, and the average in Asia was 8.54 million ha per year.

Diseases

STATUS

Forty-seven countries and areas representing 38 percent of the total forest area reported data on the area of forest affected by disease in 2020. The total area so affected was 6.13 million ha, which was 0.4 percent of the forest area of the reporting countries and areas (Table 83). The countries and areas in Europe that reported on this aspect represented 93 percent of the region's forest area; reporting countries and areas constituted 49 percent of the forest resource in North and Central America and 40 percent in Asia.

Of the regions, Asia had the largest area of forest affected by disease in 2020, at 2.96 million ha, which was just more than 1 percent of the forest area of the region's reporting countries and areas. Most of the affected area in Asia was in China, which reported 2.95 million ha of forest affected by disease, caused mainly by nematodes such as the pine wilt nematode (*Bursaphelenchus xylophilus*)

TABLE 83. Forest area affected by disease, by region, 2020

Region	Data availability		Forest area affected by insects	
	No. of reporting countries/areas	% of total forest area	Area (1 000 ha)	% of total forest area
Africa	3	1	3.93	0.1
Asia	6	40	2 960	1.2
Europe	29	93	1 117	0.1
North and Central America	4	49	2 044	0.5
Oceania	4	n.s.	0	–
South America	1		0	
WORLD	**47**	**38**	**6 125**	**0.4**

Note: n.s. = not significant.

TABLE 84. Forest area affected annually by disease, by region, 2002–2020

Region	Data availability		Forest area affected annually (1 000 ha/year)		
	No. of reporting countries/areas	% of forest area	Minimum	Maximum	Average
Africa	1	n.s.	0	0	0
Asia	5	39	761	2 952	1 341
Europe	21	88	225	750	394
North and Central America	4	49	2 044	13 012	7 424
Oceania	3	n.s.	0	0	0
South America	1		0	0	0
WORLD	**35**	**37**	**3 609**	**15 765**	**9 159**

Note: n.s. = not significant.

and fungi such as *Marssonina* spp. (National Forestry and Grassland Administration, 2021).

The second-largest area of forest affected by diseases in 2020 was in North and Central America (2.04 million ha), almost all of which was in the United States of America. Canada did not report on the area of forest affected by disease: according to its country report, this parameter is difficult to measure, especially by aerial overview surveys. Canada also reported that although root diseases are among the most widespread pathology problems in the country's forests, the symptoms and damage they cause are difficult to detect and measure.

TRENDS

Thirty-five countries and areas representing 37 percent of the forest area reported complete time-series data for the forest area affected by disease in 2002–2020. Reporting in this period was highest in Europe, with reporting countries and areas accounting for 88 percent of the region's forest area, followed by North and Central America (49 percent) and Asia (39 percent). Reporting was low in the other regions.

The average forest area affected by disease in reporting countries and areas in 2002–2020 was 9.16 million ha, with a low of 3.61 million ha in 2002 and a high of 15.8 million ha in 2019, the latter due mainly to data reported by the United States of America (Table 84).

Of the three regions with the highest reporting, North and Central America had the highest variability in the area affected by disease, with a low of 2.04 million ha in 2020, a high of 13.0 million ha in 2019, and an average of 7.42 million ha.

Severe weather events

STATUS

Forty-eight countries and areas representing 33 percent of the total forest area reported data on the area of forest affected by severe weather events in 2020. The total area affected was 3.49 million ha, which was

TABLE 85. Forest area affected by severe weather events, by region, 2020

Region	Data availability		Forest area affected by severe weather events	
	No. of reporting countries/areas	% of total forest area	Area (1 000 ha)	% of total forest area
Africa	1	n.s.	0	0.0
Asia	6	9	46.1	0.1
Europe	30	97	925	0.1
North and Central America	5	41	2 515	0.8
Oceania	5	n.s.	0.42	1.4
South America	1		0	
WORLD	**48**	**33**	**3 486**	**0.3**

Note: n.s. = not significant.

TABLE 86. Forest area affected annually by severe weather events, by region, 2002–2020

Region	Data availability		Forest area affected annually (1 000 ha/year)		
	No. of reporting countries/areas	% of forest area	Minimum	Maximum	Average
Africa	1	n.s.	0	0	0
Asia	5	8	622	37.6	200
Europe	21	88	1 485	224	739
North and Central America	4	40	8 064	1 329	6 019
Oceania	3	n.s.	2	0	0
South America	1		0	0	0
WORLD	**35**	**30**	**9 244**	**1 936**	**6 958**

Note: n.s. = not significant.

0.3 percent of the forest area of the reporting countries and areas.

The most comprehensive reporting of the forest area disturbed by severe weather events was in Europe (97 percent of the region's forest area), followed by North and Central America (41 percent). Reporting was below 10 percent in the other regions.

Among the regions, North and Central America reported the largest area of forest affected by severe weather events in 2020, at 2.52 million ha (0.8 percent of the forest area of reporting countries and areas in the region), due mainly to data reported by the United States of America. The second-largest area was in Europe, at 925 000 ha (0.1 percent) (Table 85), due mainly to data reported by Germany and Spain. Germany reported that the area of forest affected by severe weather events could be underestimated because some of the damage was measured in cubic metres and it was not possible to convert this into a corresponding area.

TRENDS

Thirty-five countries and areas representing 30 percent of the world's forest area reported annual data on the area of forest affected by severe weather events in 2002–2020. Reporting was highest in Europe, with reporting countries and areas accounting for 88 percent of the region's forest area, followed by North and Central America (40 percent). Reporting was less than 10 percent in the remaining regions.

The average forest area affected by severe weather events globally over the period was 6.96 million ha, with a high of 9.24 million ha in 2019 and a low of 1.94 million ha in 2020 (Table 86).

The area affected varied considerably over time. In Europe, the highest yearly value was 1.49 million ha in 2005 and the lowest was 224 000 ha in 2004, with an average of 739 000 ha per year. The peak in 2005 was due mainly to data reported by Italy and Spain. In North and Central America, the largest area affected by severe weather events was in 2019, at 8.06 million ha, due mainly to data reported by the United States of America.

Fire

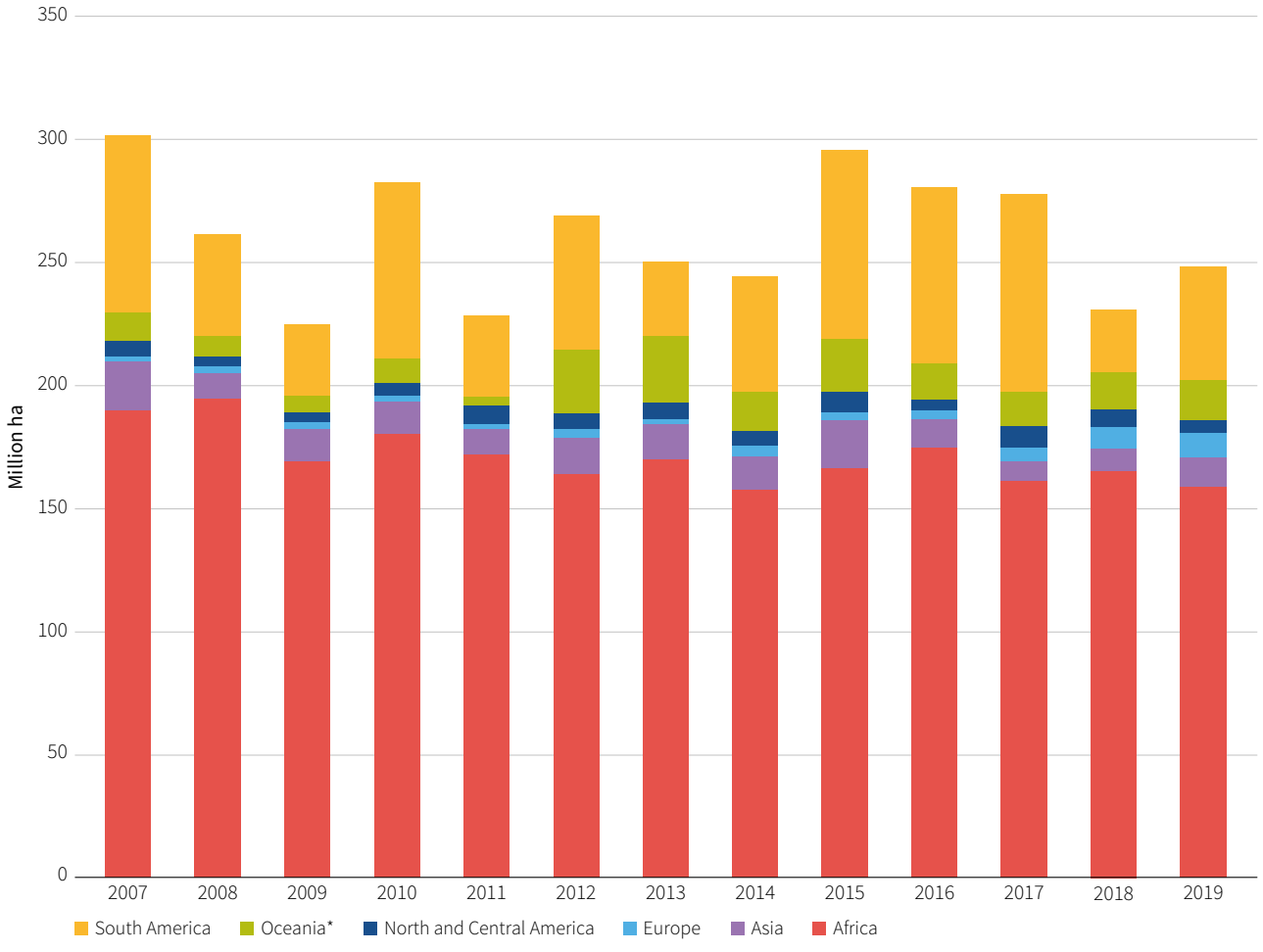
Fire is used widely in land management but, when uncontrolled, it can have major negative impacts on people, ecosystems and climate (FAO, 2024a). The intensity and frequency of wildfires is increasing, due largely to climate change and land-use change, even in areas that previously were largely unaffected (FAO, 2024b).

To provide a global overview of fire extent and trends, FRA 2025 collected information on land and forest area affected annually by fire in the period 2000–2023. Many countries and areas were unable to provide any fire-related data, however, or they provided incomplete time series in which data were available for some years but not for others. Moreover, national approaches and systems for recording and reporting fire-affected area vary widely, further complicating collation at the global level. FRA 2025 involved considerable (and still ongoing) efforts to harmonize and improve data on forest fire (Box 5 and Box 6).

To avoid the misinterpretation of regional and global trends due to these factors, estimates of the area affected by fire presented here are limited to the period 2007–2019, using data provided by countries and areas that reported complete time series for affected land and/or affected forest over the entire period. Data for Australia were available only for affected forest area (and not affected land area) in 2007–2021. Given this, the analysis used Australia's affected forest area as a conservative proxy for its affected land area in estimating the land area affected by fire in Oceania.

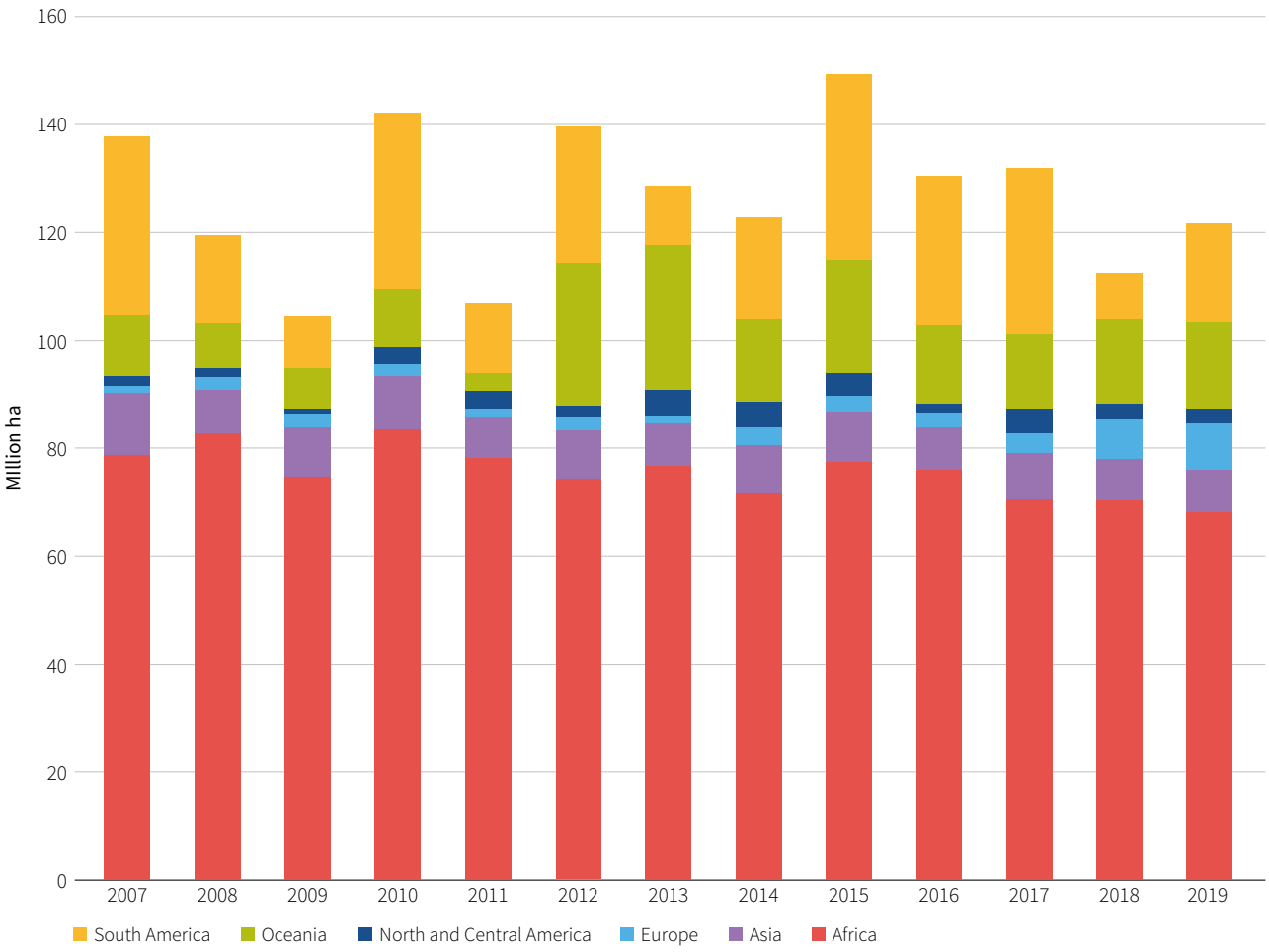
For FRA 2025, data from 152 countries and areas representing nearly 90 percent of the global land area were used to estimate the land area affected by fire in 2007–2019.

FIGURE 45. Total land area affected by fire per year, by region, 2007–2019



Note: * Australia did not provide data on total land area affected by fire. Therefore, in generating the estimate for Oceania, the forest area affected by fire in Australia was used as a conservative proxy for that country's affected land area.

FIGURE 46. Forest area affected by fire per year, by region, 2007–2019



On average, 261 million ha of land was affected annually. The largest area was in 2007, at 302 million ha, and the lowest was in 2009, at 225 million ha (Figure 45). Almost two-thirds of the affected land area was in Africa.

For FRA 2025, 168 countries and areas representing 86 percent of the global forest area reported complete time series for the forest area affected by fire in 2007–2019. Over the period, 127 million ha of forest, on average, was affected by fire annually; the largest affected area was in 2015, at 149 million ha (Figure 46). Most (60 percent) of the affected forest area was in Africa. In 2019, 79 percent of the forest area affected by fire was in the subtropical domain, 8 percent was in the boreal domain, 8 percent was in the tropics, and 6 percent was in the temperate domain.

Outside 2007–2019, data provided for FRA 2025 indicated that 2023 was a record-breaking year for the forest area affected by fire in Canada, at 14.6 million ha (involving the evacuation of more than 232 000 people – Jain *et al*., 2024). In the same year, the forest area affected by fire in Chile (288 000 ha) was ten times greater than the long-term (2000–2020) average; Jones *et al*. (2024) reported that 131 people died as a result of these fires. Jones *et al*. (2024) also indicated that the European Union's largest-ever recorded wildfire occurred (in Greece) in 2023, and there were also major fires in western Amazonia and northern parts of South America. According to Kerber and Alkonis (2025), disastrous fires in Hawaii in 2023 caused 102 deaths.

Forest degradation

Forest degradation is a global concern, directly contributing to climate change and biodiversity loss and affecting millions of people who depend on forests for their livelihoods. As attention has focused increasingly on this issue, "forest degradation" and similar terms have been

Box 5. Reporting on the extent of forest fire

As part of Global Forest Resources Assessment (FRA) reporting on the area affected by fire, national correspondents and their teams were requested to document data sources for each reporting year and each variable. These data entries were used to conduct a metadata analysis, which found that the most common data source for reporting on land area affected by fire was remote sensing, accounting for 49 percent of data entries. The next most common data source was the use of registers and statistics (45 percent); about 1 percent of the data was based on national forest inventories; and the remainder drew on other sources, such as expert estimates.

The most common sources of reporting on forest area affected by fire were registers and statistics (53 percent of data entries), followed by remote-sensing-based estimates (40 percent) and national forest inventories (5 percent). Specific sources of data for this parameter were not indicated for the remainder.

In total, 134 countries and areas representing about 76 percent of the global land area reported on both the land area affected by fire and the forest area affected by fire for all reporting years in 2007–2019. Among these countries and areas, forest accounted for an average of 33 percent of the total land area affected by fire.

Overall, the information provided by countries and areas for FRA 2025 was not sufficiently comprehensive to generate fully representative global fire statistics. There are many reasons for this. Several small countries and areas have low or no fire risk due to factors such as land use, demographics, vegetation types and climate. For such countries and areas, the effort to collect data and report on fire might be difficult to justify. Some other countries and areas that did not report on fire for FRA 2025 are arid or semi-arid, and fires might be uncommon.

Recognizing that not all countries have access to national data on areas affected by fire, FAO has integrated a set of geospatial tools into the FRA Platform. These tools enable countries and areas to access and process freely available current and future global geospatial datasets, including on fire-affected area. Data on fire-affected area are also available as total annual burned area and forest burned area through the Global Wildfire Information System Statistics Portal* for the period 2002–2019.

More reliable time-series data on the area of burned forest are needed to better understand trends in wildland and forest fires. Systems for monitoring the area subject to fire could be a starting point for more intensive analyses and to enable appropriate intersections with other datasets, such as forest cover, leading to country-level validation in future FRAs.

To help harmonize and standardize reporting, FAO is collaborating with partners, including the Joint Research Centre of the European Commission, to generate more consistent global data to support global, regional and national strategies on integrated fire management. This work is being coordinated by the Global Fire Management Hub (Box 6).

Note: * GWIS (Global Wildfire Information System). 2025. Country profile. In: *GWIS*. [Cited 4 March 2025]. https://gwis.jrc.ec.europa.eu/apps/country.profile/

TABLE 87. Countries and areas with official national definitions of forest degradation and their forest areas, 2025

Region	No. of reporting countries/areas with national definitions	Forest area of countries/areas with national definitions (1 000 ha)	Total no. of countries/areas in the region	Of the reporting countries/areas with national definitions:	
				% of total forest area in the region (1 000 ha)	% of total no. of countries/areas in the region
Africa	24	245 064	58	37	41
Asia	13	464 637	48	74	27
Europe	7	14 657	50	1	14
North and Central America	8	80 896	41	10	20
Oceania	3	137 212	25	75	12
South America	4	576 016	14	68	29
WORLD	**59**	**1 518 483**	**236**	**37**	**25**

Box 6. The Global Fire Management Hub

In recognition of the need for more collaborative support for countries on integrated fire management, FAO and the United Nations Environment Programme launched the Global Fire Management Hub ("Fire Hub") at the 8th International Wildland Fire Conference in May 2023. The Fire Hub brings together key partners with the aim of strengthening countries' capacities to implement integrated fire management and thereby reduce the negative effects of wildfires on people, landscapes, biodiversity and global climate stability. The Fire Hub's work is based on five cross-cutting pillars: 1) knowledge- and data-sharing; 2) capacity building; 3) wildfire-resilient communities; 4) fire-risk reduction and early warning; and 5) integrated fire management policy design and implementation.

The Fire Hub's work on knowledge- and data-sharing includes defining major fire concepts; producing publications; providing technical advice on integrated fire management; convening workshops and events; and enabling easy access to datasets and products. The Fire Hub brings together the remote-sensing community, data providers and users, and researchers to enhance global collaboration and improve and harmonize reliable fire statistics and analysis at the national, regional and global levels to elevate the profile of integrated fire management. Key areas of focus include the following:

- **Connecting and refining global data with national, regional and more detailed datasets.** How can we better integrate different levels of information to improve accuracy and usability?
- **Differentiating wildfire data from data on prescribed and cultural/traditional fire.** What methodologies or practices could help us make these distinctions more effectively?
- **Data quality and validation.** How can we ensure the reliability of Earth-observation fire data, given the enormous number of datasets available?
- **Policy and governance.** What role does Earth observation play in shaping fire-related policies and governance frameworks? Are there clear mechanisms to ensure that these data lead to actionable outcomes?

referenced more frequently in international dialogues, particularly in the context of the UNFCCC.

Forest degradation is defined in various ways in the scientific and policy literature, reflecting not only biophysical differences among forest types but also differing perceptions, objectives and values. To bring clarity to discussions on this topic and facilitate future reporting on forest degradation, FAO's governing bodies recommended that the Organization "lead discussions with Members, as well as with relevant international organizations as appropriate, to define "forest degradation" within the FRA process". In response to this recommendation, FRA 2025 collected information on forest degradation as part of the reporting process. Countries and areas were requested to provide information on the existence of national definitions and their characteristics, the existence of monitoring systems and methods used, and the estimated area of degraded forest.

Information on the availability of national definitions of forest degradation was obtained for 214 countries and areas representing more than 99 percent of the global forest area. Fifty-nine countries and areas, covering about 37 percent of global forest area, reported having national definitions of forest degradation. The region with the highest proportion of countries and areas with official national definitions is Africa (41 percent of countries and areas), followed by South America (29 percent) and Asia (27 percent) (Table 87). Seventeen other countries and areas reported that, although official national definitions of forest degradation do not exist in their jurisdictions, they have adopted existing definitions from other sources (15 countries/areas) or developed sets of operational criteria (two countries/areas) for monitoring purposes.

The definitions reported by countries and areas offer useful insights into the range of criteria used to define forest degradation. Analysis of the verbatim definitions enabled the classification of definitions into two main groups: one that describes degradation by listing the type of forest disturbances causing it (e.g. forests disturbed by illegal logging, frequent fires or unsustainable management practices) and a second (larger) group that describes degradation by listing the impacts of those disturbances, such as changes in forest structure, reduced provision of forest goods and services, and loss of biodiversity.

The list of criteria used in national definitions was collected systematically using a close-ended questionnaire. The most commonly occurring criterion is "change in forest structure or decrease in forest canopy", found in 68 percent of the 74 submitted definitions (59 official definitions and 15 operational definitions), followed by "loss of carbon, biomass and growing stock" (45 percent) and "loss of productivity and forest goods" (35 percent) (Figure 47). Nearly 60 percent of the definitions include more than one criterion.

FIGURE 47. Core elements in 74 submitted definitions of forest degradation, comprising 59 national legal and 15 operational definitions, 2025

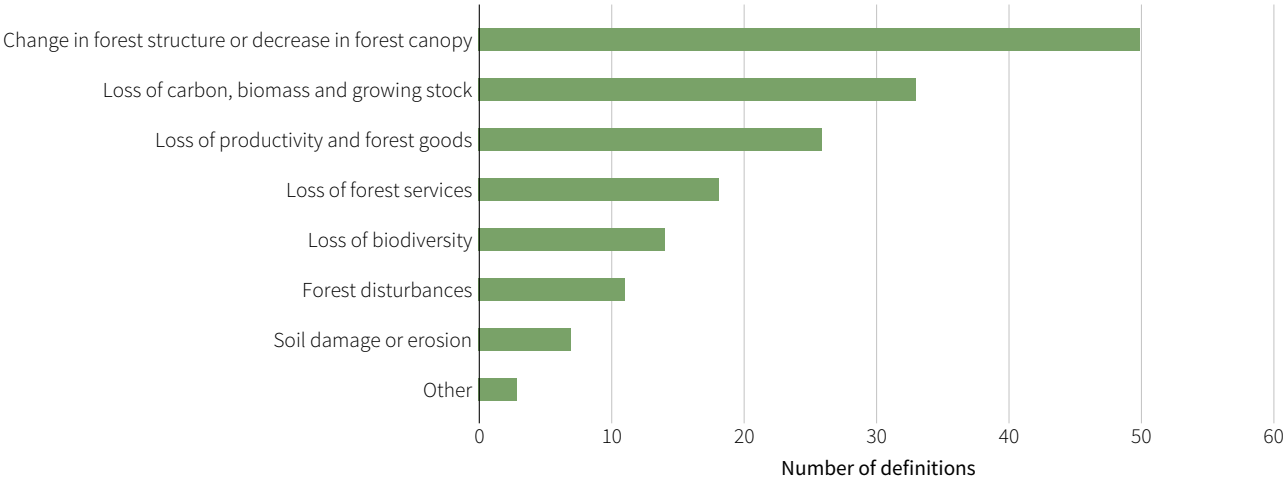
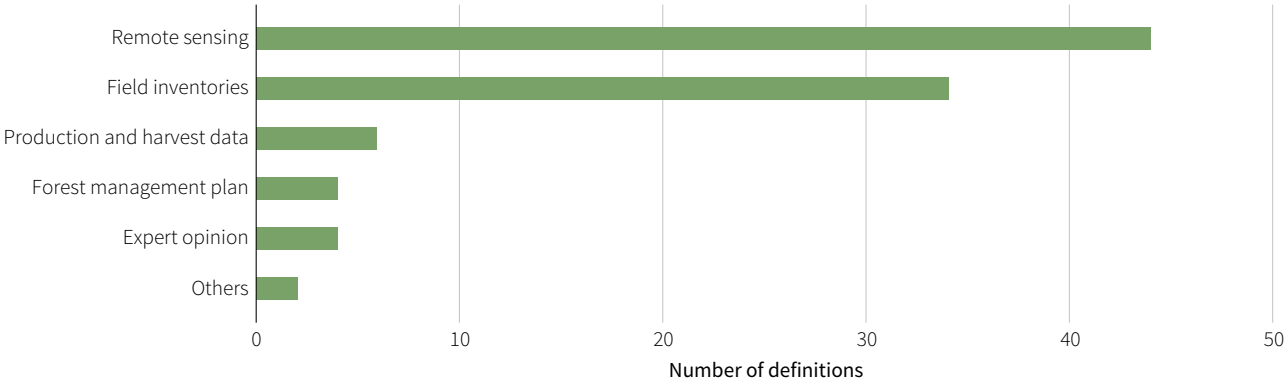


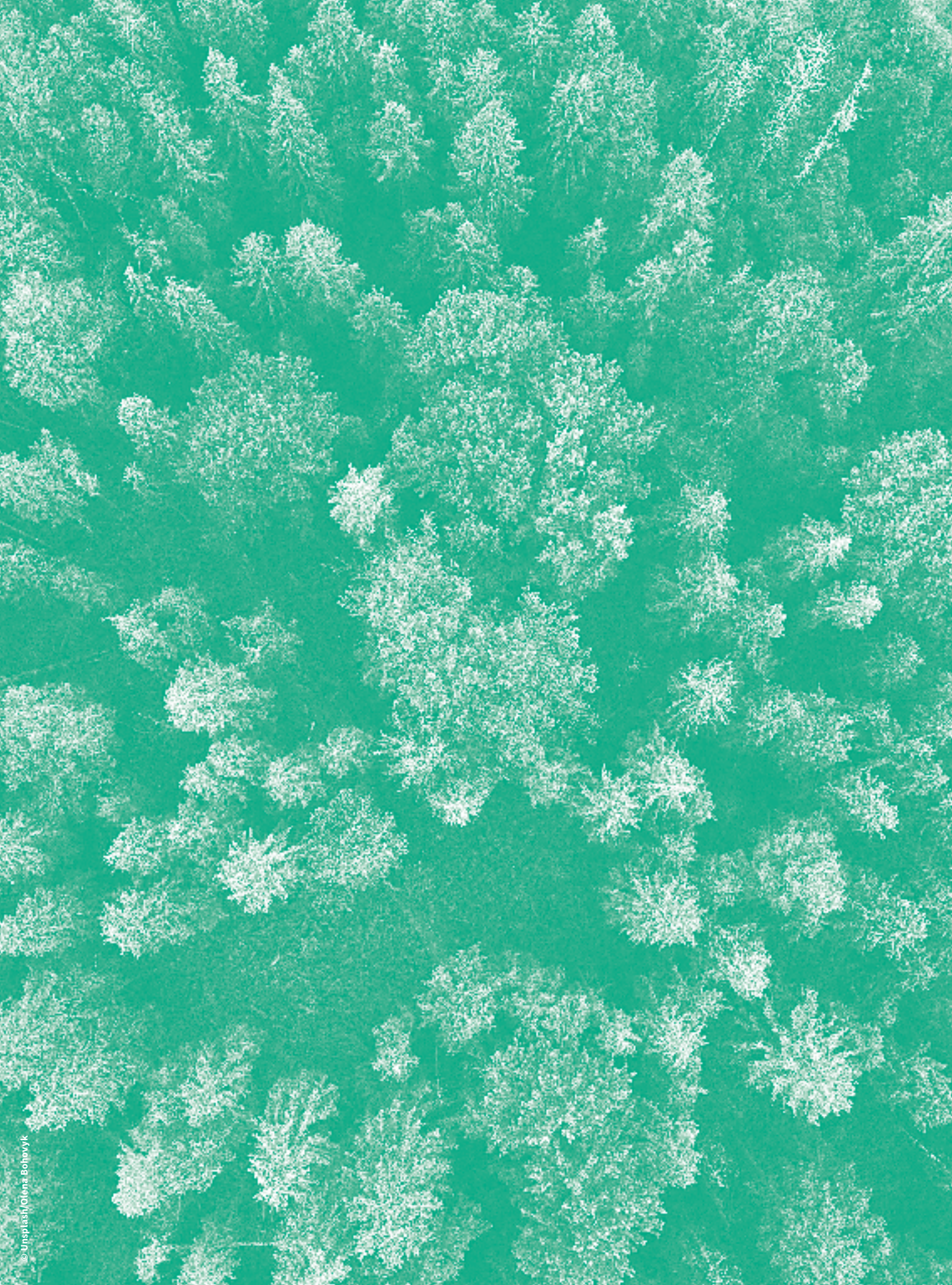
FIGURE 48. Methods applied by countries and areas for monitoring forest degradation



Around three-quarters of the countries and areas (57 of 76) that submitted definitions of forest degradation or sets of criteria to assess forest degradation indicated that they have attempted to monitor its extent. The most common monitoring methods are remote-sensing-based assessment and mapping, used by 77 percent of those countries and areas, followed by field inventories and observations (nearly 60 percent) (Figure 48) (more than 50 percent of the countries and areas applied a combination of monitoring methods).

The collected data will guide an FAO-led taskforce – comprising FAO Member Nations, FAO and other international entities, and other experts – to establish an international definition of forest degradation for future FRA cycles.

8 Policies and legislation



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An essential condition for SFM is that national policies identify sustainable development as an overall priority across sectors. This is particularly important for those sectors such as forestry dealing with renewable natural resources and competing for land. To be effective, policy development should be accompanied by legally binding instruments: the laws and regulations governing forest use and conservation must be consistent with policies and constitute the basis for their implementation.

National policies and legislation supporting SFM are in place in 192 countries and areas representing more than 95 percent of the global forest area (Figure 49). The highest coverage is in Africa, Asia and South America, with about 90 percent of countries and areas in each of those regions (54 countries and areas in Africa, 42 in Asia and

FIGURE 49. Countries and areas reporting the existence of polices and legislation supporting sustainable forest management, 2025

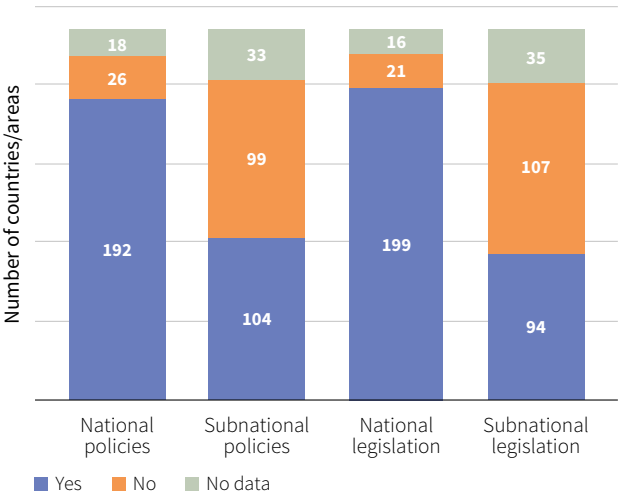


FIGURE 50. Number and percentage of countries and areas that have adopted national policies and legislation supportive of sustainable forest management, by region, 2025

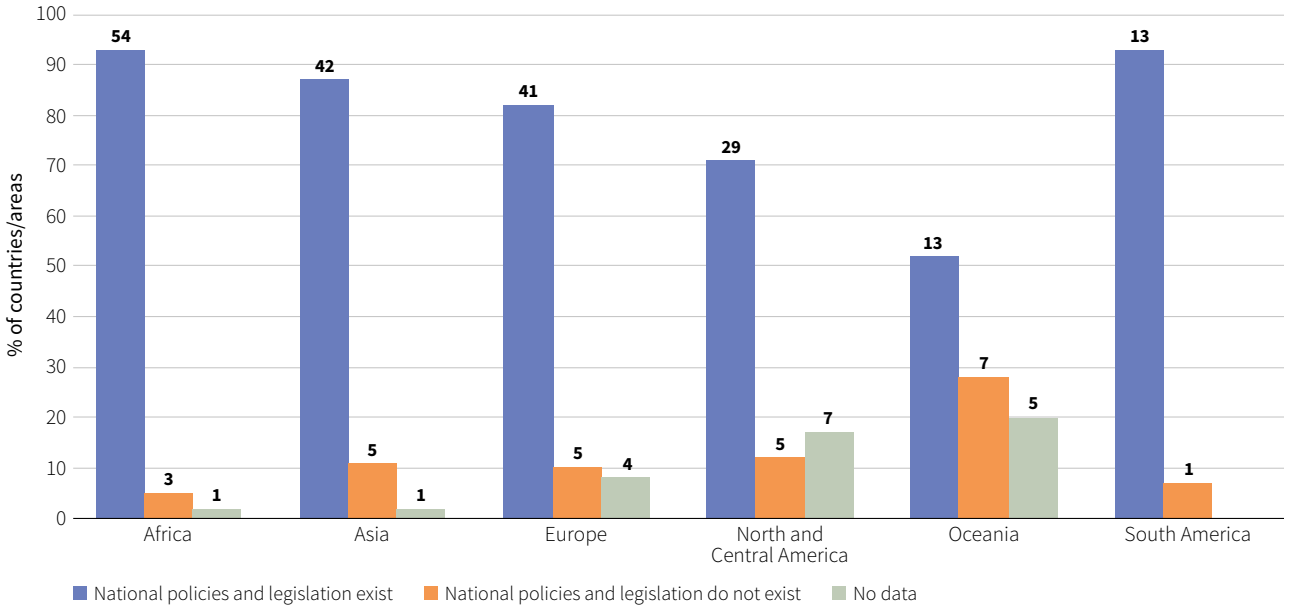
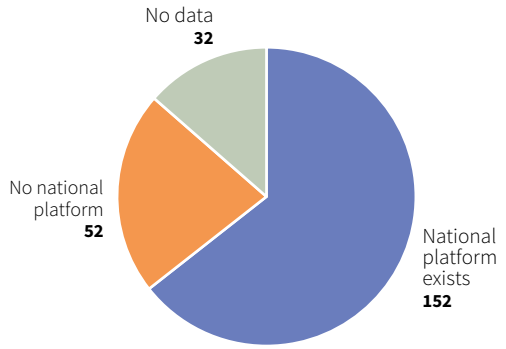


FIGURE 51. Number of countries and areas with national multistakeholder platforms for forest policy development, 2025



13 in South America) – representing about 48 percent of the global forest area – reporting that such national forest policies and legislation are in place (Figure 50). This high level of coverage is likely due partly to work in recent decades to develop policies and laws that formalize and better reflect customary practices in statutory instruments. It may also be due in part to efforts to integrate emerging issues such as climate change and gender into policies and laws with the aim of improving SFM and complying with international forest-related commitments.

Many Small Island States, such as the Marshall Islands and Nauru in Oceania, are yet to formally adopt national instruments aimed at protecting and sustainably using their forests because forest cover is small or SFM is not a priority. Overall, 52 percent of countries and areas (13 countries and areas) in Oceania have national policies and legislation in place to support SFM.

Among the 236 countries and areas, about 40 percent (98 countries and areas) indicated that they have not yet introduced subnational instruments regulating SFM. Some countries and areas (e.g. Guyana and Madagascar) commented that policies and laws supporting SFM are developed at the national level and then applied at the subnational and local levels, and some others (e.g. Singapore) reported that they lack subnational entities.

Stakeholders often have differing perspectives on, and interests in, forest resources. Participatory approaches that involve stakeholders help ensure that these perspectives are fully taken into account in decision-making on forests and that forest management and use better meet stakeholder needs. Multistakeholder platforms facilitate participatory processes and provide spaces for local stakeholders to engage in decision-making in the various facets of forest management, including policy development.

Of the 236 countries and areas reporting for FRA 2025, 64 percent (152 countries and areas representing almost 95 percent of the world's forests) indicated that they have national platforms for stakeholder participation in forest policy development (Figure 51), including 85 percent of responding countries and areas in Africa (Figure 52).

FIGURE 52. Number and percentage of countries and areas with national platforms for stakeholder participation in forest policy development, by region, 2025

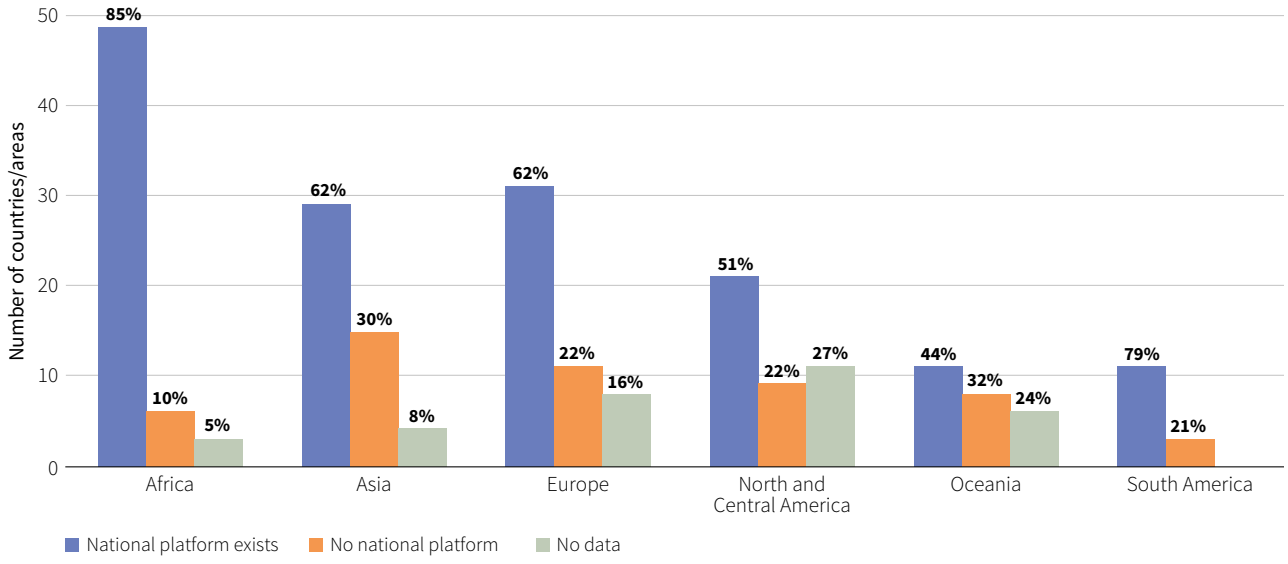


FIGURE 53. Number and percentage of countries and areas with subnational platforms for stakeholder participation in forest policy development, by region, 2025

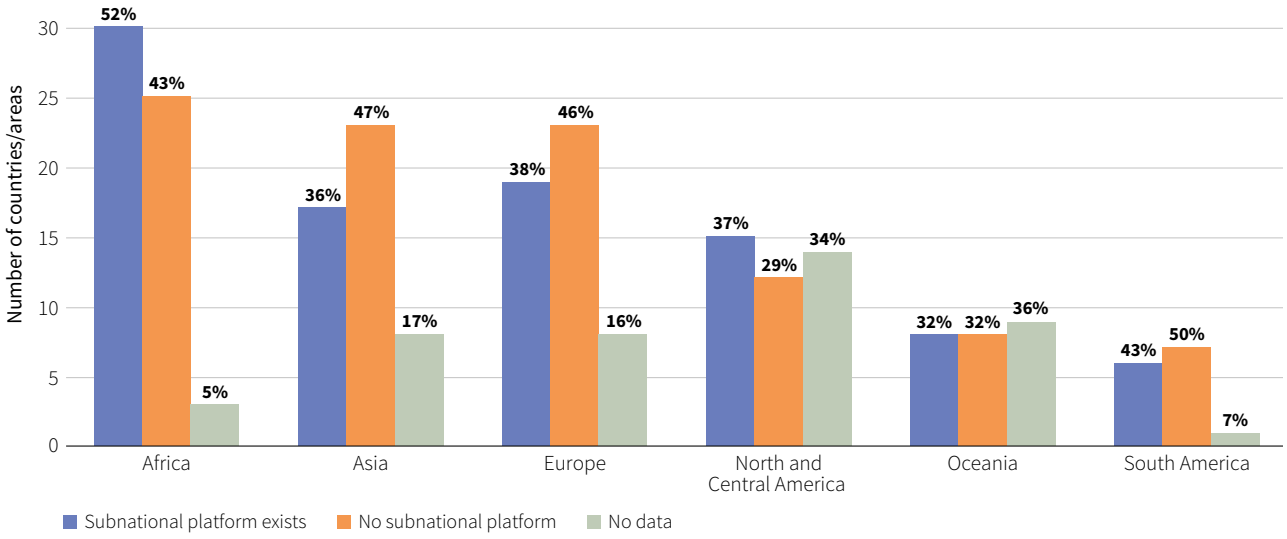
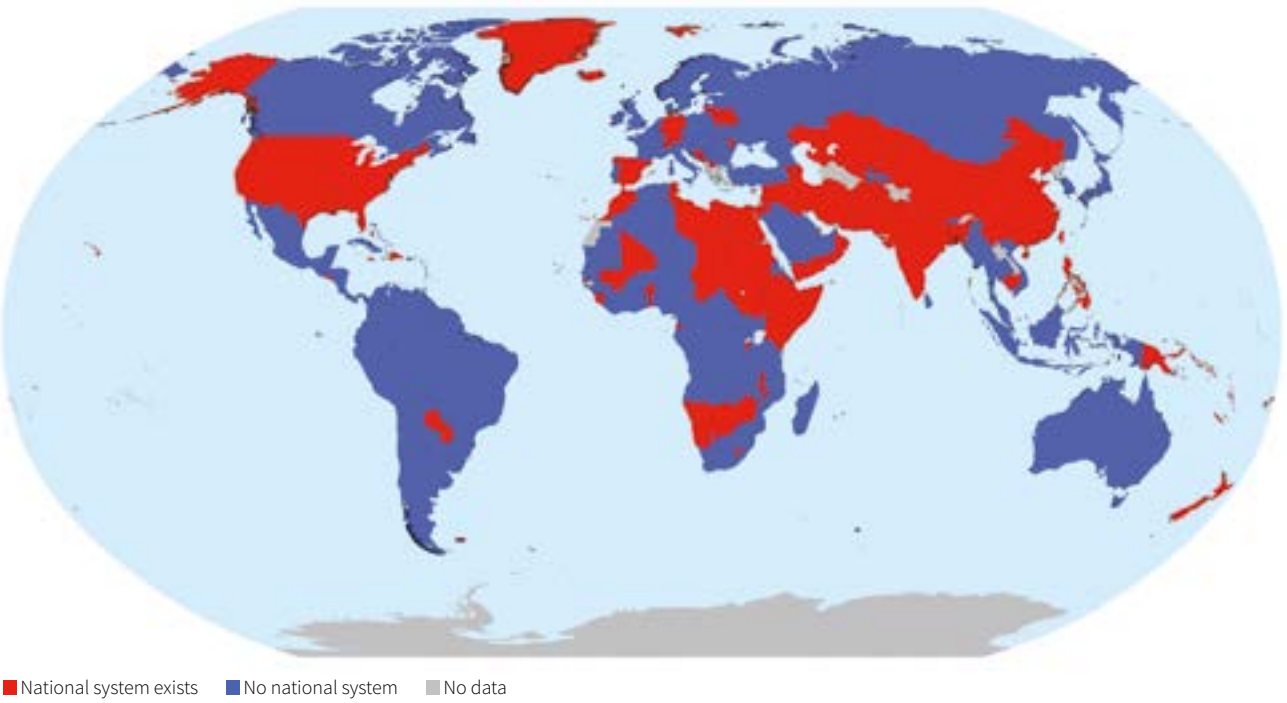


FIGURE 54. Countries and areas with traceability systems for wood products, 2025



Note: Refer to the disclaimer on page ii for the boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

FIGURE 55. Number and percentage of countries and areas with national traceability systems for wood products, by region, 2025

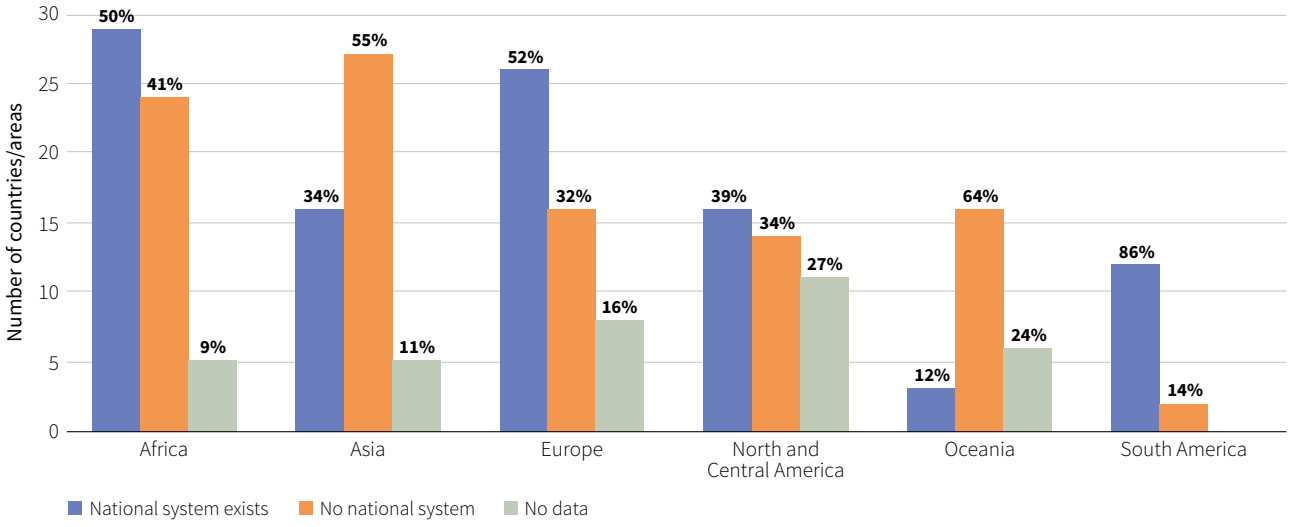
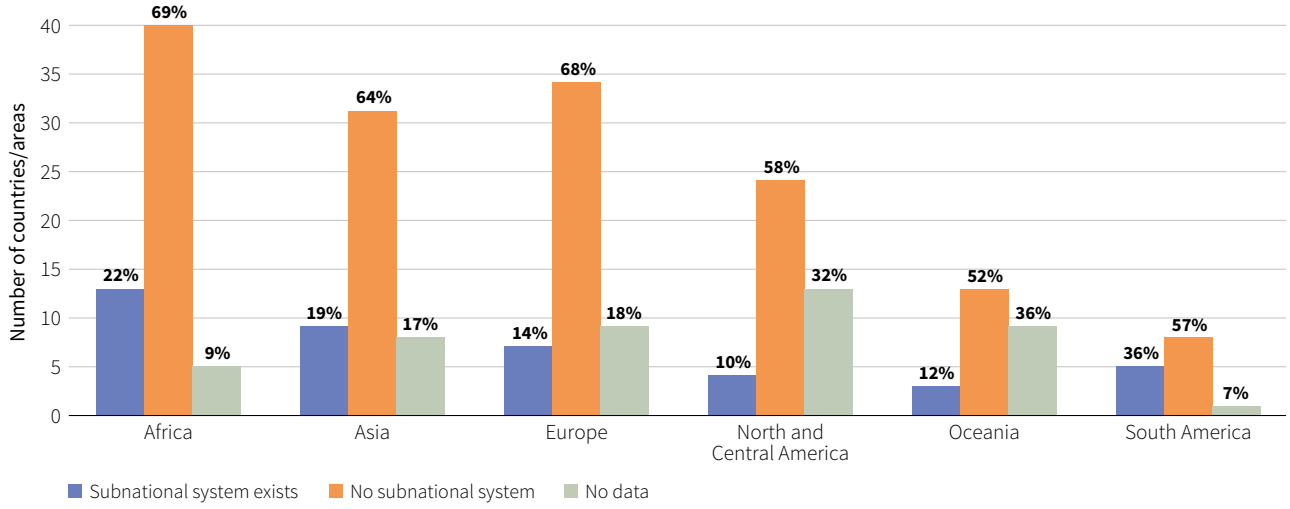


FIGURE 56. Number and percentage of countries and areas with subnational traceability systems for wood products, by region, 2025



About 40 percent of countries and areas (95 countries and areas) indicated that they have subnational platforms, including 52 percent of responding countries and areas in Africa, 43 percent in South America and 32–38 percent in the other regions (Figure 53). Some countries and areas commented that, although there are no official platforms promoting stakeholder participation in the forest sector, competent institutions engage with a broad range of actors through various channels to inform national forest policies (e.g. the participatory development of the National Forest Restoration Plan in Paraguay).

Forest traceability is a growing global trend, with governments and consumers requiring reliable tracking of forest products sold with claims (such as on legality or sustainability), from their origin through supply chains to end users. Forest traceability can contribute to legal compliance, formalization and the suppression of illegal timber markets and promote transparency and due-diligence processes.

Of the 236 countries and areas, 102 (43 percent) – representing 77 percent of the global forest area – have established national traceability systems for wood products (Figure 54 and Figure 55). Forty-one countries and areas (17 percent) have developed subnational traceability systems (Figure 56).

Of the regions, South America has the highest percentage of national and subnational wood-product traceability systems in place (86 percent and 36 percent, respectively, of countries and areas in the region). About 50 percent of countries and areas in Europe and Africa have national traceability systems, and the percentages are lower in Asia (34 percent) and Oceania (12 percent).

9
Non-wood forest products

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Forests offer a diverse array of NWFPs, such as berries, mushrooms, aromatic plants, medicinal and decorative plant materials, nuts, saps, resins, foods, fodder, wild meat and honey. Such products are vital components of the livelihoods and well-being of billions of people. Many NWFPs are also crucial for subsistence, enhancing food security by mitigating the seasonal variability of other food supplies. Many play significant cultural, spiritual and health-related roles.

Data on NWFPs tend to be incomplete, fragmented and inconsistent, and most global statistical reports and datasets on the production, trade and consumption of forest products focus on wood-based products. There are two main reasons for the general lack of data on NWFPs: data collection is often based on formally marketed NWFPs, overlooking informally traded products and those harvested for household consumption; and the vast diversity of NWFPs, inconsistent definitions, and challenges in standardizing data from various sources complicate data harmonization.

For FRA 2025, countries and areas were asked to report data for 2020 on the ten most significant NWFPs in terms of monetary value, with NWFPs defined as "goods derived from forests that are tangible, physical objects of biological origin, excluding wood". Countries and areas were also asked to estimate the removals and supply of key NWFP species (also for 2020). The information received was classified according to product characteristics (e.g. plant- or animal-based) and the intended uses.[15]

Analysis indicates a 36 percent increase in the number of countries and areas reporting on NWFPs in FRA 2025 compared with FRA 2020, representing an additional 5 percent of the global forest area (for a total of 78 percent, see below). Despite the improvement, inconsistencies in reporting on the quantity of NWFP removals make it difficult to aggregate quantity data at the global and regional levels. Therefore, this chapter provides an overview of the most-reported NWFP categories and their economic value; it also provides information on wood removals (Box 7) and forest-sector employment (Box 8).

Most-reported non-wood forest product categories

A total of 169 countries and areas accounting for 78 percent of the global forest area reported information on NWFPs for FRA 2025. Reporting countries and areas represented more than 90 percent of the forest area in all regions except Europe, where data were not received from the Russian Federation. Reporting countries and areas in Europe accounted for 19 percent of the forest area in the region (Table 88); they provided data on NWFPs for 97 percent of the region's forest area, data for the Russian Federation subtracted.

FRA 2025 requested information on the ten most important NWFPs. More than 50 percent of the reporting countries and areas in Africa (62 percent), Asia (61 percent) and Oceania (53 percent) submitted information on their top ten NWFPs; 32 percent and 35 percent of countries and areas did so in North and Central America and Europe, respectively (Figure 57). More than 75 percent of countries and areas in all regions except North and Central America (53 percent) provided data on (at least) the five most important products.

At the global level, NWFPs classified as food accounted for nearly half (45 percent) of all NWFPs in the most frequently reported NWFP categories (Figure 58), comprising edible non-animal products as well as wild honey, wild meat and other edible animal products. The second most frequently reported category (22 percent) was raw materials for medicinal purposes (20 percent for plants and 2 percent for animals).

[15] For FRA 2025, NWFPs were classified as either plant-based or animal-based. **Plant-based products** include food, fodder, raw material for medicine and aromatic products, raw material for colourants and dyes, raw material for handicrafts, utensils and construction, ornamental plants, exudates, and other plant products. **Animal-based products** comprised wild meat, honey and beeswax, hides, skins and trophies, living animals, raw material for medicine, raw material for colourants, other edible products and other non-edible products.

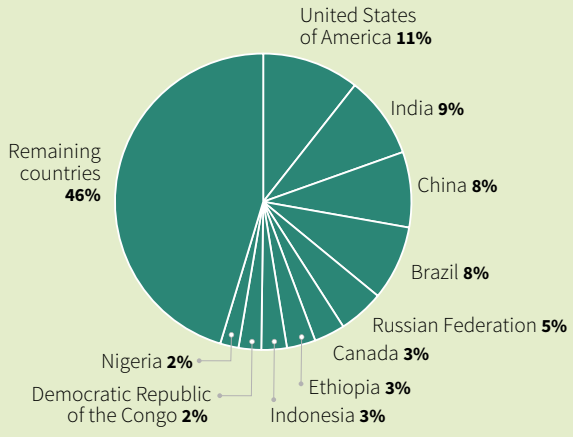
Box 7. Wood removals

The volume of wood removed from forests is an indicator of the economic and social roles of forest resources in national economies and dependent local communities. In most countries and areas, revenue from harvested wood is the single-largest source of income from forests. Information on wood removals also helps in monitoring the use of forest and tree resources by comparing actual removals with sustainable potential.

The analysis presented here is based on data on removals contained in the FAOSTAT database.[i] FAO and partner agencies (Eurostat, the International Tropical Timber Organization and the United Nations Economic Commission for Europe) annually collect statistics on removals of roundwood, the production of various wood and paper products, and trade in these products. Global statistics on wood and paper products (including wood removals) have been collected and published annually in the *FAO Yearbook of Forest Products* since 1947 and in FAOSTAT since 1961.

Global wood removals were estimated at 3.86 billion m^3 in 2023 (the latest available data), of which about half was industrial roundwood and the other half woodfuel. This volume includes removals from forests, other wooded land and trees outside forests. There are significant differences among the regions in the percentages of the wood harvest used as woodfuel, ranging from 90 percent in Africa and 61 percent in Asia to 41 percent in South America and less than 25 percent in Europe, North America and Oceania. Table A shows regional and subregional wood removals for selected years in the period 1990–2023.

FIGURE A. Top ten countries and areas for wood removals as a proportion of total wood removals, 2023



Source: FAO. 2024. FAOSTAT: Forestry production and trade. [Accessed on 23 December 2024]. https://www.fao.org/faostat/en/#data/FO. Licence: CC-BY-4.0.

The top ten countries and areas for wood removals, led by the United States of America, accounted for 54 percent of total global removals in 2023 (Figure A). Global wood removals reached a record level of just more than 4 billion m^3 in 2018 (Figure B). Harvest volumes were also high in 2021–2022 but declined in 2023 due to reduced demand for industrial roundwood for the production of sawnwood and wood pulp.[ii] Global wood removals have fluctuated in recent decades in response to changes in the production of coniferous industrial roundwood, with significant declines in the early 1990s (during the breakup of the Soviet Union), 2009 (during the global financial crisis) and 2022–2023. In contrast, global removals of non-coniferous industrial roundwood and woodfuel have grown steadily since the 1960s. The proportions of industrial roundwood and woodfuel were roughly the same in 1990 and 2023, although there was variation among the regions.

Wood removals increased steadily in Africa, from 506 million m^3 in 1990 to 820 million m^3 in 2023; the average annual growth of 2 percent in the region over the period was in line with population growth. Removals increased for both industrial roundwood and woodfuel.

In Asia, wood removals were roughly steady between 1990 and 2023, with the supply of industrial roundwood increasing and the volume of woodfuel removals declining correspondingly. This trend was influenced by the rapid development of forest-based industries in the region (i.e. increasing demand for industrial roundwood) and growing living standards (which reduced demand for woodfuel as alternative energy sources became available), particularly in the East Asia and South and Southeast Asia subregions.

A sharp decline in removals in the Russian Federation in the early 1990s – the result of a transition from a centrally planned to a market-based economy – caused an overall reduction in removals in Europe of 21 percent between 1990 and 2000. Removals in Europe rebounded thereafter, however, reaching 797 million m^3 in 2020, followed by a decline of 6 percent in 2021–2023.

Removals in North and Central America were relatively stable in the 1990s but declined sharply in the 2000s due to the global financial crisis, which had negative impacts on the housing sector and consequently on wood demand, especially in Canada and the United States of America. Total removals in the region decreased from 761 million m^3 in 2000

(Continued)

to 614 million m^3 in 2010 before rebounding – in line with economic recovery – to 672 million m^3 in 2020. Removals contracted by 4 percent in 2021–2023 following a slowdown in the wood-processing sector. Woodfuel removals have been growing in North America since 2010 to meet increasing export demand for wood pellets.

There was a steady increase in wood removals in Oceania between 1990 and 2020. Four countries (Australia, New Zealand, Papua New Guinea and Solomon Islands) accounted for most of the volume in the region, which doubled from 43 million m^3 in 1990 to 80 million m^3 in 2020, due largely to an increased supply of wood from plantation forests in Australia and New Zealand. Wood removals in Oceania dropped by 6 percent between 2020 and 2023 due to reduced log exports to Asia.

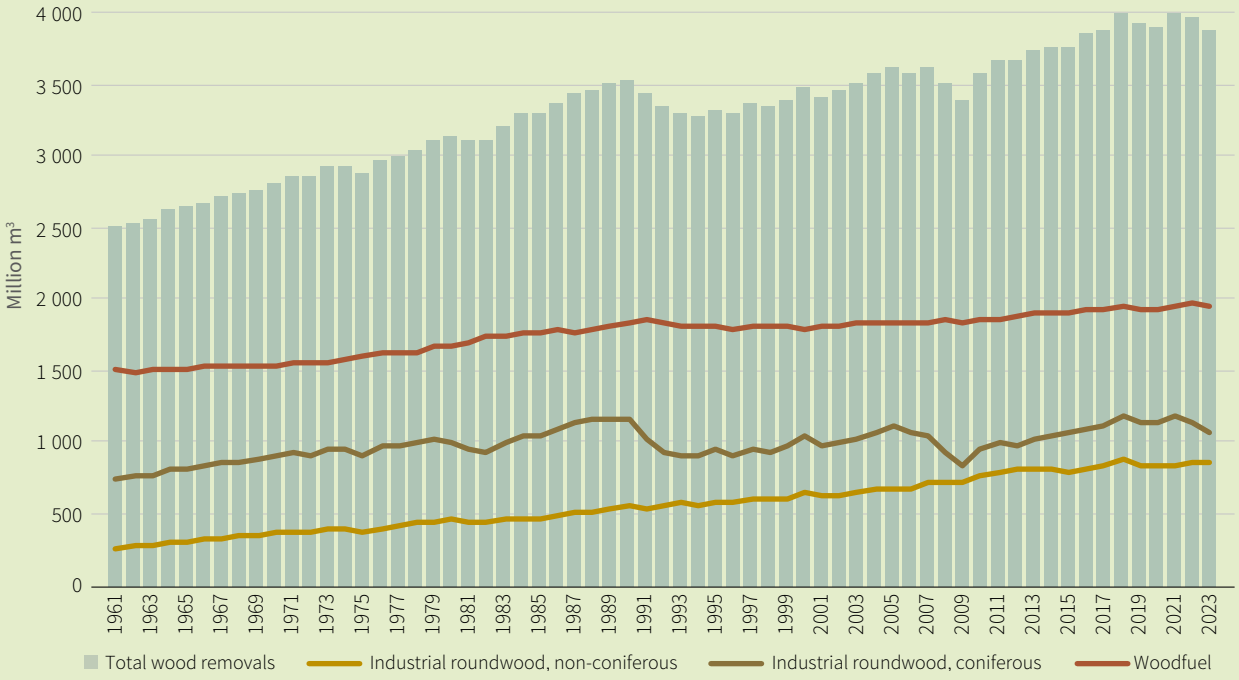
Wood removals in South America grew steadily, from 272 million m^3 in 1990 to 458 million m^3 in 2023. A growing supply of industrial roundwood from plantation forests (especially in Argentina, Brazil, Chile and Uruguay) accounted for most of the increase. The increases were especially large in Brazil and Uruguay due to the rapid rise in woodpulp production capacities in those two countries since the early 2000s.

Overall, wood removals are increasing globally as demand for, and the consumption of, wood products grow in line with population and income growth. This trend is expected to continue in coming decades.

Not all wood removals originate in forests, and the volume of wood removals in 2023 was less than 1 percent of the forest growing stock. Most of the long-term growth in wood supply is occurring in countries and areas that have established plantation forests in recent decades (especially in Asia, Latin America and Oceania).

Sources: [i] FAO. 2024a. FAOSTAT: Forestry production and trade. [Accessed on 23 December 2024]. https://www.fao.org/faostat/en/#data/FO. Licence: CC-BY-4.0. [ii] FAO. 2024b. *Global forest products facts and figures 2023*. Rome. https://doi.org/10.4060/cd3650en

FIGURE B. Global trends in wood removals, 1961–2023



Source: FAO. 2024. FAOSTAT: Forestry production and trade. [Accessed on 23 December 2024]. https://www.fao.org/faostat/en/#data/FO. Licence: CC-BY-4.0.

(Continued)

TABLE A **Industrial roundwood and woodfuel removals, by region and subregion, 1990–2023**

	Wood removals (million m³)																	
	Industrial roundwood						Woodfuel						Total					
	1990	2000	2010	2015	2020	2023	1990	2000	2010	2015	2020	2023	1990	2000	2010	2015	2020	2023
Eastern and Southern Africa	30	36	35	35	38	38	200	250	293	308	322	331	229	286	327	343	359	369
Northern Africa	3	4	3	2	2	2	46	51	56	59	61	60	49	55	60	62	63	62
Western and Central Africa	29	32	33	37	37	39	199	250	295	312	331	350	228	282	328	349	368	388
Africa	**61**	**71**	**72**	**75**	**77**	**79**	**445**	**551**	**644**	**679**	**713**	**741**	**506**	**623**	**715**	**754**	**790**	**820**
East Asia	123	117	184	176	195	199	295	236	196	182	173	168	418	353	380	358	368	367
South and Southeast Asia	134	134	176	202	224	217	590	563	557	538	519	508	724	697	733	741	744	725
Western and Central Asia	9	14	19	23	26	25	11	9	11	14	15	15	20	22	29	37	41	40
Asia	**265**	**265**	**378**	**401**	**445**	**441**	**897**	**808**	**764**	**735**	**708**	**690**	**1 162**	**1 073**	**1 143**	**1 136**	**1 153**	**1 132**
Europe, with data for the Russian Federation subtracted	n a	374	371	389	424	400		97	141	153	154	161		471	512	542	578	560
Europe	**642**	**520**	**533**	**580**	**627**	**578**	**157**	**109**	**155**	**168**	**169**	**176**	**799**	**629**	**688**	**748**	**797**	**754**
Caribbean	1	1	1	1	1	1	6	4	5	5	5	5	7	6	6	6	6	6
Central America	3	3	4	4	4	4	34	38	42	43	44	45	37	42	45	47	48	49
North America	591	628	480	511	518	485	123	86	82	88	100	106	713	714	562	599	618	591
North and Central America	**595**	**632**	**485**	**517**	**523**	**490**	**162**	**129**	**129**	**136**	**150**	**156**	**757**	**761**	**614**	**652**	**672**	**646**
Oceania	**34**	**47**	**57**	**64**	**70**	**66**	**9**	**13**	**11**	**10**	**10**	**10**	**43**	**60**	**68**	**74**	**80**	**76**
South America	**110**	**147**	**198**	**217**	**241**	**270**	**162**	**185**	**162**	**172**	**178**	**188**	**272**	**332**	**359**	**388**	**419**	**458**
WORLD	**1 707**	**1 682**	**1 722**	**1 853**	**1 984**	**1 925**	**1 833**	**1 795**	**1 864**	**1 900**	**1 927**	**1 961**	**3 540**	**3 478**	**3 586**	**3 753**	**3 911**	**3 886**
														−21%	**9%**	**9%**	**8%**	**−6%**

TABLE 88. **Reporting for non-wood forest products, and representativeness in terms of forest area, by region, 2020**

Region	No. of reporting countries/areas	% of regional forest area
Africa	50	99
Asia	38	94
Europe	34	19
North and Central America	19	99
Oceania	17	99
South America	11	97
Total	**169**	**78**

Note: For non-wood forest products (NWFPs) and some other variables, the Global Forest Resources Assessment (FRA) 2025 (and also previous FRAs) requested countries and areas to provide actual data and not to estimate them; for FRA 2025, the reference year was 2020. Given that NWFP data are for 2020, the estimated forest area in 2020 is used here to calculate the percentage of the regional forest area with NWFPs.

Food was the most frequently reported NWFP category in all regions. The highest share of NWFPs classified as food was in Africa, at 49 percent, and the lowest was in North and Central America, at 29 percent. Raw materials for utensils (which include bamboo, rattan, palm leaves, cork and other species) ranked second in North and Central America (23 percent of countries and areas) and South America (20 percent); in Europe, ornamental plants – mainly Christmas trees, lichens and mosses – occupied second place (13 percent). Raw materials for medicine was the second-largest category in Asia (31 percent), Oceania (27 percent) and Africa (21 percent), where traditional medicines are widely used (Figure 59).

Economic value of non-wood forest products

FRA 2025 received quantitative data on the economic value of NWFPs from 84 countries and areas representing 51 percent of the global forest area. Reporting on the economic value of NWFPs was highest in North and Central America (97 percent of the forest area), South America (86 percent) and Oceania (78 percent) and significantly lower in Asia (28 percent), Africa (19 percent) and Europe (18 percent, or 89 percent if data for the Russian Federation are subtracted).

The global reported value of NWFP removals was approximately USD 9.41 billion in 2020,[16] with plant-based products contributing nearly 80 percent of this total (Figure 60).

[16] Exchange rates were sourced from: https://viewpoint.eiu.com/data/. For the Bolivarian Republic of Venezuela, Somalia and South Sudan, the rates were obtained from: United Nations. 2025. UN Operational Rates of Exchange – Rates. In: *United Nations*. [Cited 24 September 2024]. https://treasury.un.org/operationalrates/OperationalRates.php

FIGURE 57. Percentage of countries and areas that reported on their ten most important and five most important non-wood forest products, by region

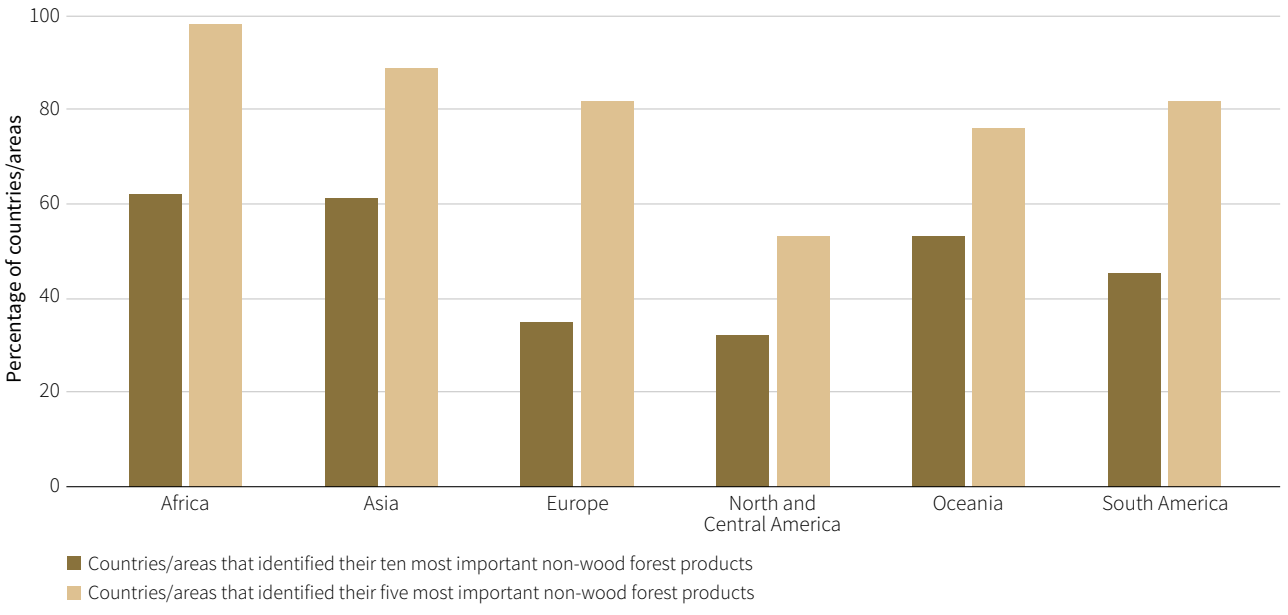
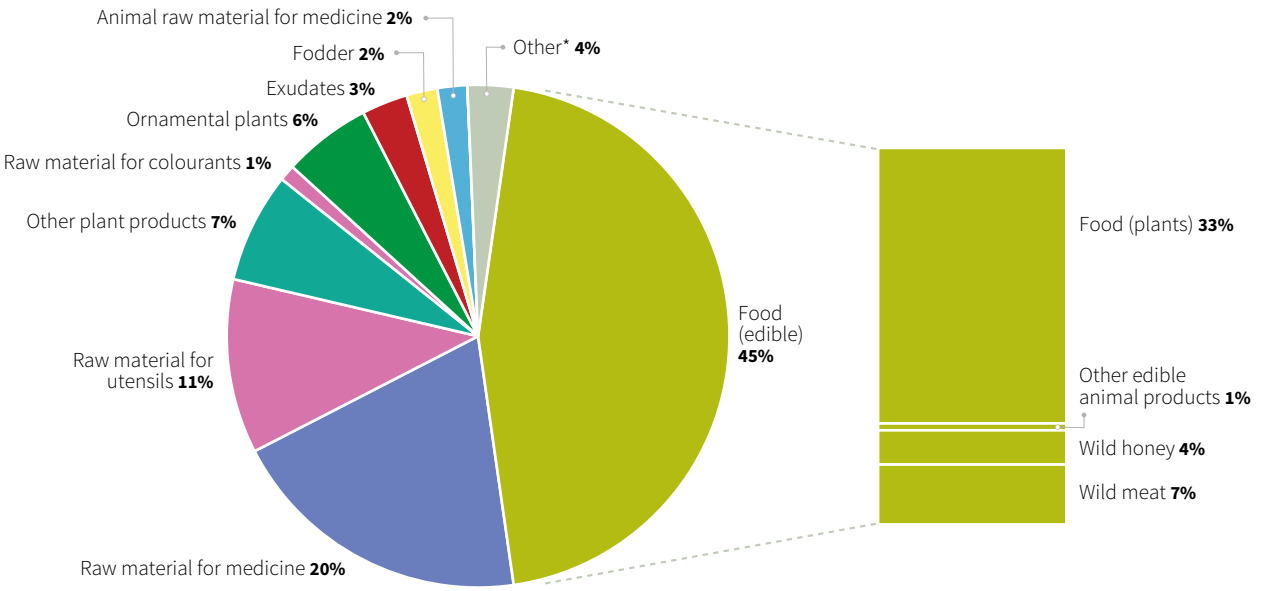


FIGURE 58. Share of non-wood forest product categories, by reporting frequency



Note: * "Other" includes hides/skins, living animals, other non-edible animal products, animal raw material for colourants, and raw material for colourants. Each of these products accounts for less than 2 percent of the total. Percentages represent the proportion of reporting countries/areas that indicated the existence of non-wood forest products in a given category.

FIGURE 59. Relative frequency of reporting of non-wood forest products by countries and areas, by region and main category

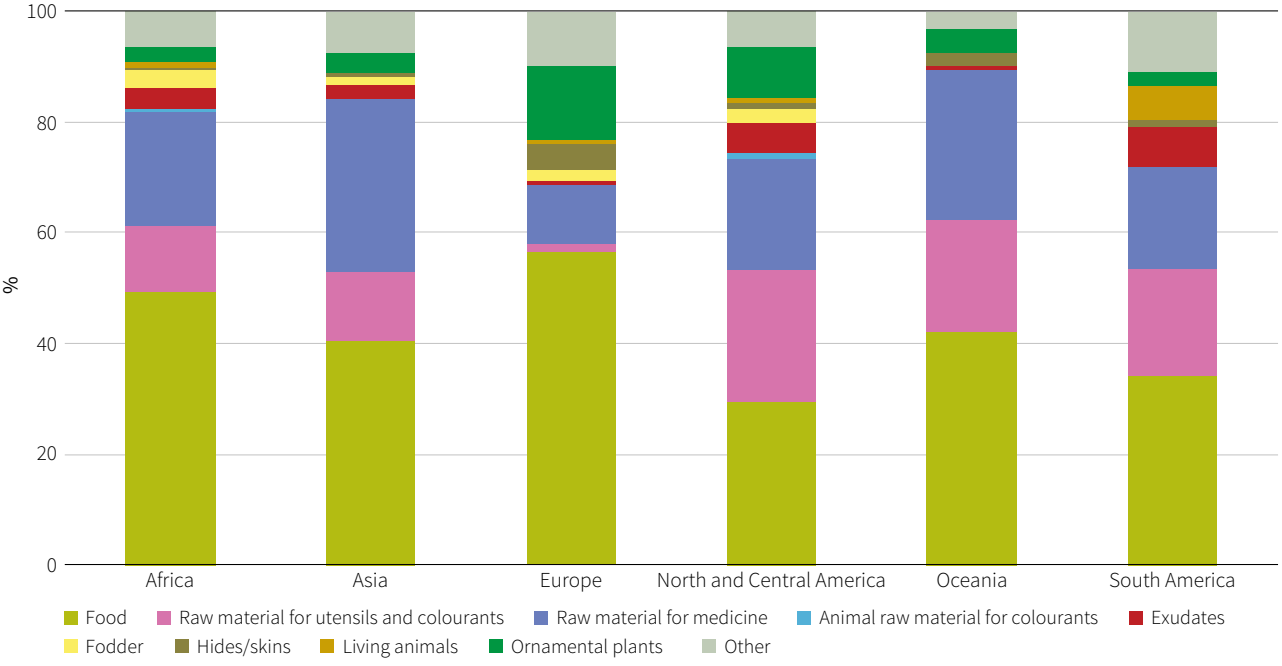


FIGURE 60. Reported total annual value of non-wood forest product removals, and most reported category of non-wood forest products for economic value, by region, 2020

Most-reported product (values in USD billion): Ornamental plants Food (edible plants) Exudates Wild honey

Note: Refer to the disclaimer on page ii for the boundaries used in this map. Numbers shown on the map represent total reported annual value of non-wood forest product removals in a given region. Those countries/areas that provided information on these aspects are not differentiated on the map from those that did not.

Globally, the most significant product category in 2020 was food (edible plants), accounting for 36 percent of the total economic value of NWFPs. Other economically valuable product categories were ornamental plants (24 percent of total economic value), wild meat (14 percent), other plant-based products (8 percent), wild honey (6 percent) and medicinal plants (5 percent). Combined, exudates, fodder, hides and skins, and raw material for utensils accounted for 7 percent of the total value (Figure 61).

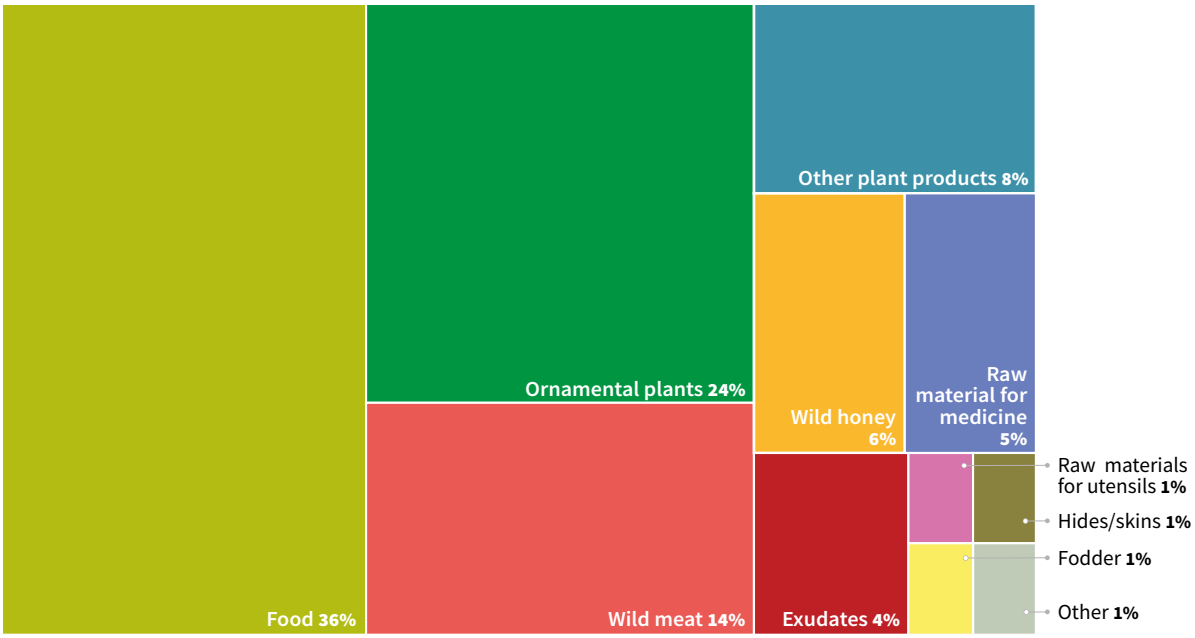
In Europe, ornamental plants accounted for almost 30 percent of the total NWFP value, followed by edible plants (27 percent) and wild meat (22 percent). The high market share of ornamental plants is due mainly to Christmas trees, with Germany, the United Kingdom of Great Britain and Northern Ireland, and Denmark commanding 44 percent, 31 percent and 9 percent, respectively, of the value of this product in Europe. Edible plants mainly comprised mushrooms (constituting 49 percent of this category, by value, in the region) and berries (24 percent), with Czechia, Slovenia and Spain representing 26 percent, 22 percent and 17 percent, respectively, of the value of this product (i.e. edible plants) in Europe.

Ornamental plants accounted for nearly 43 percent of the total economic value of NWFPs in North and Central America. Maple products in Canada represented 63 percent of the value of all NWFPs in the food products category in this region.

The top three product categories in South America for economic value were food (77 percent of total NWFP economic value), raw materials for utensils (12 percent), and exudates (5 percent). Açaí fruit from Brazil accounted for almost half (44 percent) of the region's economic value of NWFPs in the food category, and rubber from Colombia constituted 45 percent of the exudates category.

In Africa, exudates and medicinal plants accounted for three-fifths (60 percent) of the total economic value of NWFPs in 2020. Ethiopia was the leading producer of gums and resins, contributing nearly 92 percent of the region's total, by value, and Morocco dominated the medicinal plants sector, with 79 percent of the total, driven largely by its production of essential oils. In Asia, food products accounted for 74 percent of the major categories, with Afghanistan contributing nearly 70 percent of this total – that country's significant share

FIGURE 61. Global importance of non-wood forest product categories, by relative economic value, 2020



was driven by pistachios (42 percent of the value of all forest food products in Asia) and pine nuts (28 percent).

In Oceania, wild honey had the highest reported economic value of any NWFP, comprising 70 percent of the total, with Australia contributing 51 percent of the total value of this product. Hides and skins made up 9.5 percent of the total economic value of NWFPs reported in the region.

Not all countries and areas that provided data on NWFPs reported the associated economic value. NWFPs hold significant cultural and social importance in some areas that may outweigh their economic value. Social and cultural contributions are challenging to quantify in economic terms, however, and might not be a priority in reporting. In some cases, reporting on NWFPs may also be intentionally restricted to mitigate the risk of overexploitation because disclosing high economic values could promote unsustainable harvesting. Many NWFPs are traded in informal markets, where prices are variable and localized. Such inconsistency in pricing complicates the estimation of economic value at the national level.

For these and other reasons, results presented in this section likely underestimate the overall contribution of NWFPs to the food security and livelihoods of rural people and to sustainable development in general. To improve data collection and quality, a crucial step would be to acknowledge the significant economic and non-economic values and roles of NWFPs at the national level through more targeted and coherent policies. Other steps would be to improve data collection methodologies, establish monitoring systems for NWFPs, and provide more statistical support to countries and areas with limited capacity.

Despite the limited availability of information, NWFPs clearly have significant economic and social value and benefit large numbers of people. The absence of systematic data on NWFPs results in a lack of recognition of their importance, leading to their underrepresentation in rural development strategies, forest management, and land-use planning and policies. Enhanced data collection on NWFPs would provide insights into their contributions to healthy diets, biodiversity conservation, poverty alleviation, economic development and achievement of the SDGs while also supporting their sustainable management. NWFPs represent a relatively untapped source of nature based solutions that could contribute meaningfully to policy priorities.

Box 8. About 1.2 percent of the global workforce is employed in the primary forest sector

Employment is a key indicator of the direct benefits derived from forest-related economic activities. Internationally comparable data on forest-sector employment are needed to enable evidence-based policymaking and for ensuring a sustainable and resilient forest sector. A comprehensive review* found that the International Labour Organization (ILO) ILOSTAT database is the best publicly available data source for comparable and robust employment statistics. The database's country coverage is too scattered, however, to generate sound global and regional figures on forest-sector employment. To address this shortcoming, the Forest Employment (FEM) model was constructed using regression and in accordance with the ILO's methodology for modelled estimates. The FEM model provides a statistical function between employment indicators and country-level information on socioeconomics, demographics, forest resources and the supply of, and demand for, forest products. Here, the concept of total employment related to the forest sector, or "forest-sector employment", refers to the sum of persons employed in formal and informal main jobs existing in forestry and logging,† the manufacture of wood and products of wood,‡ and the manufacture of paper and paper products.§ "Person in employment" is defined in alignment with the International Conference of Labour Statisticians' guidelines and resolutions. The primary input data for estimating forest-sector employment were retrieved from ILOSTAT,# FAOSTAT,¢ the World Bank and the Population Division of the United Nations Department of Economic and Social Affairs. The estimates cover the reference period 2011–2022, with a sample of 182 countries and areas representing more than 99 percent of the global forest area.

Status and contribution of subsectors. The FEM model estimates that the forest sector employed, as their main job, at least 42.0 million people globally in 2022, with the manufacture of wood and products of wood accounting for about 58 percent of this (Figure A). The significance of forestry and logging in job creation was relatively consistent

FIGURE A. Distribution of subsectoral employment in total forest-sector employment, by subregion, 2011–2022

Note : The Y-axis refers to the percentage share of subsectoral employment in total forest-sector employment in the respective geographical domain. In each bar, the share of subsectoral employment in total forest-sector employment covers the period 2011–2022. Based on data for 182 countries and areas.

(Continued)

Box 8. *(Continued)*

over the period, with nearly one-third of total forest-sector employment worldwide occurring in this subsector. The manufacture of pulp and paper contributed to about 16 percent of total employment in the forest sector in 2022.

The distribution of employment among the three subsectors varied by subregion (Figure A). There was growth in wood-manufacturing employment in Eastern and South Africa and Western and Central Africa between 2016 and 2022, despite a steady decline in forestry and logging employment, signalling a shift in labour demand and supply focus in those regions. Pulp and paper manufacturing employment represented about one-quarter of total forest-sector employment in North and South America and Europe in 2011–2022; wood manufacturing and forestry and logging also played vital roles in job creation in those regions. In Asia and Oceania, more than half of total forest-sector employment was in the manufacture of wood and products of wood, and 25 percent was employed in the forestry and logging subsector.

Employment trends in the forest sector and related industries. Globally, the forest sector accounted for 1.2 percent of total employment in all economic activities in 2022. The share of forest-sector employment declined by about 3.1 percent between 2011 and 2022, despite a marginal absolute increase in each of the three forest-related subsectors (Figure B); this is because total employment across all economic activities grew faster than forest-sector employment over the period. Figure B also shows differences in the share of employment held by the forest sector and subsectors; the impact of the Covid-19 pandemic on employment share is evident (in 2020). There was an increase in Europe between 2019 and 2021 in the share of total agricultural employment held by forestry and logging, although this dropped again in 2022. The opposite trend was observed in North America, where the share of total agricultural employment held by forestry and logging dropped significantly in 2020 but increased thereafter. Employment in wood manufacturing in Eastern and Southern Africa doubled between 2013 and 2022; in contrast, the share of total employment held by wood manufacturing declined in Northern Africa and Western and Central Africa after 2016. Total forest-sector employment in Asia stagnated after 2020, due partly to declining employment in wood manufacturing in East Asia; there was also a slight increase in employment in forestry and logging between 2020 and 2022. In the Americas, the share of total employment held by the forest sector was estimated to decline slightly in 2020 but to increase thereafter. There was rapid growth in employment in forestry and logging and wood manufacturing after 2019, particularly in the American subregions. The employment share held by pulp and paper manufacturing was relatively stable in North America, although it dropped modestly in 2022; there was a slight increase in Central America and South America over the period 2011–2022.

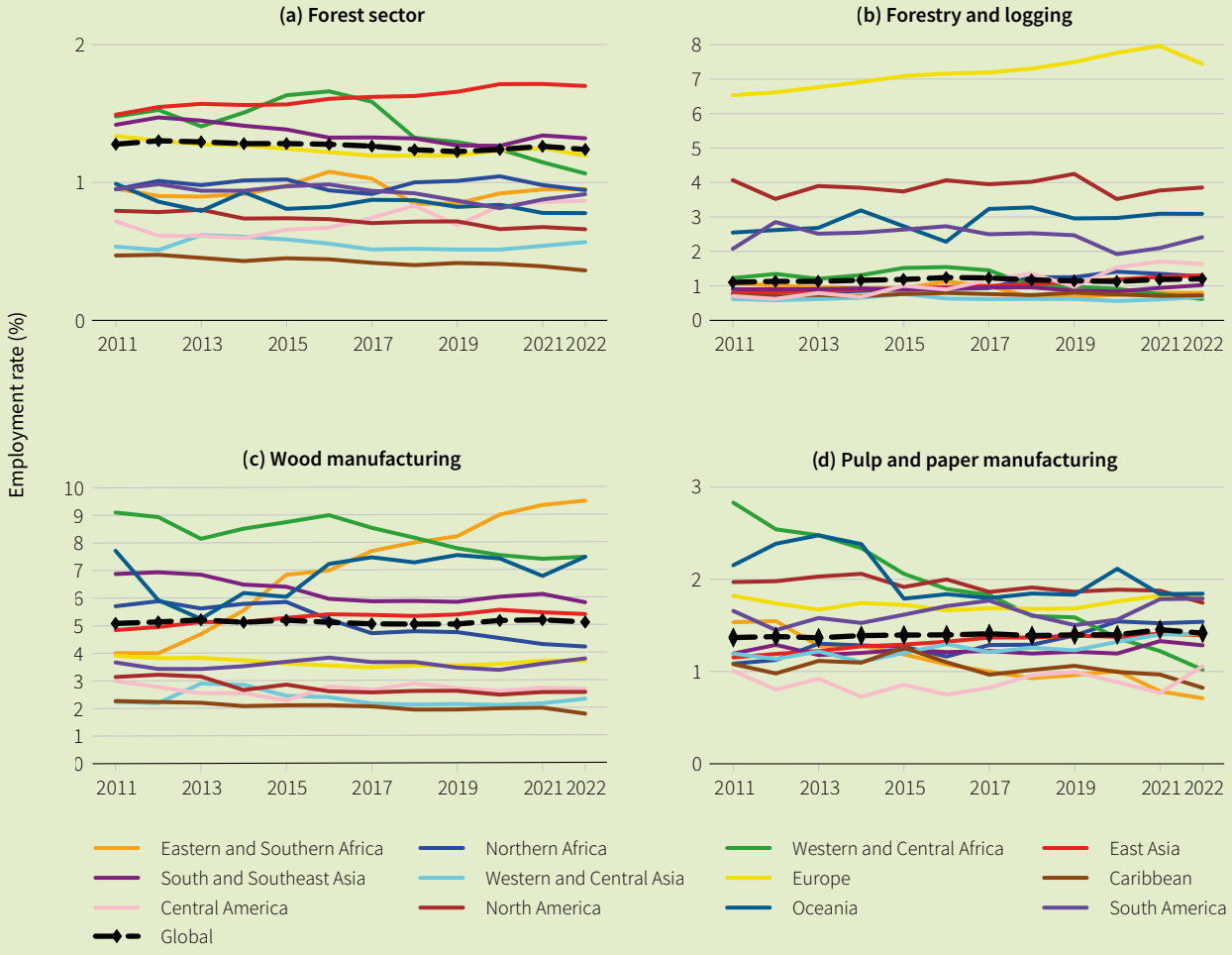
Employment trends in the forest sector and related industries, by gender. An estimated 10.6 million females were employed in the forest sector in 182 countries and areas in 2022, which was 25 percent of total forest-sector employment. Of the total global workforce, about 0.8 percent of women and 1.5 percent of men were employed in the forest sector in 2011–2022. Employment was higher for men across all regions (Figure C): in East Asia, for example, male and female forest-sector employment rates were 2.3 percent and 0.9 percent, respectively, in 2022. In Europe, about 1.8 percent of the total male workforce was employed in the forest sector in 2011–2022, which was four times the female employment rate. Western and Central Africa experienced a modest decline in forest-sector employment rates for both men and women between 2016 and 2022. Of the subregions, the Caribbean had the lowest overall employment rates in the sector over the period (the rates were 0.5 percent for men and 0.2 percent for women in 2022). Although the forest sector is male-dominated, there was an increase in women's representation: for example, the female forest-sector employment rate rose gradually in South and Southeast Asia, particularly after the pandemic, reaching 1.4 percent in 2022.

Women's contribution to the forest sector and related industries. Women's participation in the forest sector was lower than that of men in all subregions between 2011 and 2022, ranging from 17 percent to 29 percent of total forest-sector employment in 2022 (Figure D). Globally, women's share of forest-sector employment was relatively stable over the period, but it decreased significantly in Western and Central Africa and Eastern and Southern Africa, from about 37 percent in 2011 to 27 percent in 2022. This decline was particularly pronounced in forestry and logging and the manufacturing of paper and paper products. In contrast, women's participation in the forest sector increased gradually over the period in North America and South and Southeast Asia. In North America, there were increases in

(Continued)

women's share in all subsectors; in South and Southeast Asia, growth was evident in wood manufacturing and pulp and paper manufacturing. Conversely, there was a decrease in the share of women employed in forestry and logging and wood manufacturing in Central America between 2011 and 2022. The percentage of the female workforce participating in the pulp and paper manufacturing subsector increased in South America over the period.

FIGURE B. Employment trends in the forest sector, by subregion and subsector, 2011–2022



Note: Employment rate in Figure B(a) refers to the share of total forest-based employment using the Forest Employment (FEM) model and estimates for total employment of all economic activities based on International Labour Organization (ILO) modelled estimates. Employment rate in Figure B(b) refers to the share of employment in forestry and logging using the FEM model and estimates of total agriculture employment based on ILO modelled estimates. Employment rate in Figure B(c) refers to the share of employment in manufacturing of wood and products of wood using the FEM model and estimates of total manufacturing employment based on ILO modelled estimates. Employment rate in Figure B(d) refers to the weighted share of employment in manufacturing of pulp and paper using the FEM model and estimates of total manufacturing employment based on ILO modelled estimates. ILO modelled estimates used in this study refer to estimates in November 2023. Geographical domains are based on the subregions used by FAO Global Forest Resources Assessments. All data used in this figure are based on 182 countries and areas.

(Continued)

Box 8. *(Continued)*

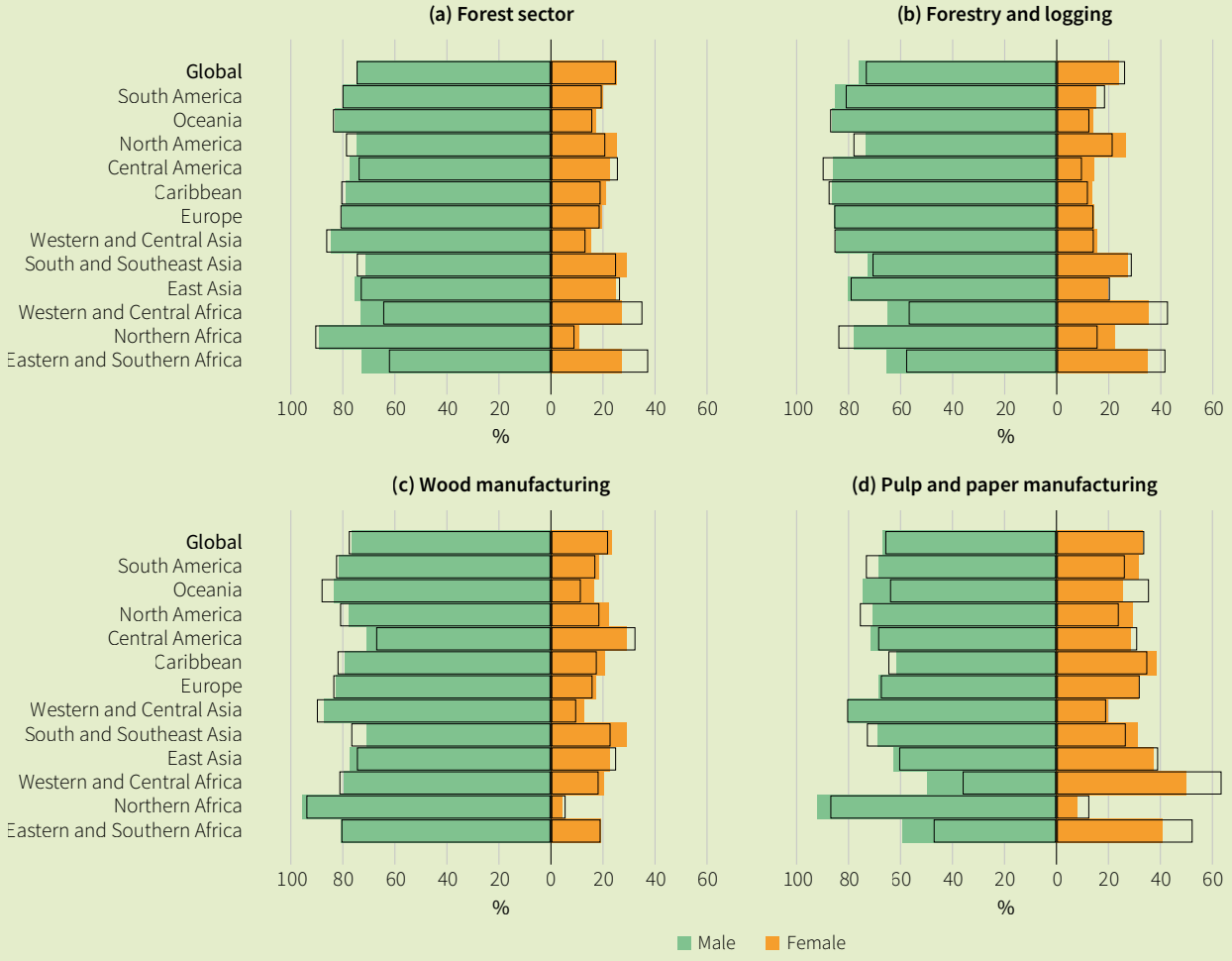
FIGURE C. Forest-sector employment, by gender and subregion, 2011–2022

Notes: Figure C(a) refers to the global share of male and female forest-based employment in all economic activities, using the Forest Employment (FEM) model based on International Labour Organization (ILO) modelled estimates. Figure C(b–m) refers to the share of male and female forest-based employment in all economic activities by region, using the FEM model based on ILO modelled estimates. ILO modelled estimates used in this study refer to estimates made in November 2023. Geographical domains are based on the subregions used by Global Forest Resources Assessments. All graphs are based on 182 countries and areas.

(Continued)

Box 8. *(Continued)*

FIGURE D. Males and females employed in the forest sector as a share of total employment, by subsector and region or subregion, 2011 and 2022



Notes: The green and orange bars refer to the share (%) of male and female forest-sector employment, respectively, in total employment, by subsector and region or subregion, in 2022. The transparent overlay bar (grey line) indicates the share (%) of male and female employment in total employment, by subsector and region or subregion, in 2011. Geographical domains are based on the regions/subregions used by Global Forest Resources Assessments. All graphs are based on 182 countries and areas.

Notes: * Lippe, R.S., Schweinle, J., Cui, S., Gurbuzer, Y., Katajamäki, W., Villarreal-Fuentes, M. & Walter, S. 2022. *Contribution of the forest sector to total employment in national economies: Estimating the number of people employed in the forest sector.* Rome and Geneva, Switzerland, FAO and International Labour Organization. † As specified by International Standard Industrial Classification (ISIC) Revision 4, the forestry and logging subsector (ISIC division 02) incorporates silviculture, raw wood-producing activities, the extraction and gathering of non-wood forest products, and products that undergo little processing in the forest, such as firewood and charcoal. ‡ As specified by ISIC Revision 4, the manufacture of wood and products of wood (ISIC division 16) covers the manufacture of semi-finished wood (e.g. sawmilling, veneer sheets and wood-based panels) and products of wood, cork, straw and plaiting materials, except furniture. This study uses the terms "manufacture of wood and products of wood" and "wood manufacturing" interchangeably. § As specified by ISIC Revision 4, the manufacture of paper and paper products (ISIC Division 17) covers the manufacture of pulp, paper, paperboard, corrugated paper, containers of paper and other articles of paper and paperboard. This study uses the terms "manufacture of paper and paper products" and "pulp and paper manufacturing" interchangeably. # Employment data retrieved from ILOSTAT are those published in 2024. This refers to the ILO modelled estimates of the November 2023 version. ¢ FAOSTAT is FAO's global statistical database. It provides free access to food and agriculture data for more than 245 countries and areas and covers all FAO regional groupings from 1961 to the most recent year available.

Source: Lippe, R.S., Gurbuzer, Y., Paloma, C., Schweinle, J., C., Katajamäki, W. & Walter, S. (forthcoming). Updated methodology to quantify employment in the forest sector: Global and regional estimates.

10 Discussion

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FAO has been coordinating global forest resource assessments since 1946. In the present report, information was collected from 236 countries and areas for about 50 variables related to the extent, condition, uses and values of forests, for six points in time – 1990, 2000, 2010, 2015, 2020 and 2025.

Building on nearly 80 years of experience (FAO, 2018a), FRA 2025 has (compared with FRA 2020) increased the participation of countries in the report, strengthened and extended the network of national correspondents, reduced the reporting burden on Members, increased capacity-development activities, and improved data availability, transparency and quality. Through FRA 2025, FAO has also initiated a transition towards a more flexible FRA reporting modality, setting the stage for further advances in global forest reporting.

Increased country participation and an enhanced network of national correspondents

Since 2005, FRAs have been based on country reports prepared by a global network of officially nominated national correspondents, who are responsible for compiling national data for FRA reports and submitting these to the FRA team. For FRA 2025, 197 countries and areas had national correspondents, an increase of ten compared with FRA 2020 and the highest number of national correspondents for any FRA. In addition, 178 alternate correspondents were nominated. Forty-two desk studies, representing 1.6 percent of the total forest area in 2025, were prepared for countries and areas that did not submit reports.

The national correspondents and their alternates coordinated and gathered the inputs of other collaborators for the compilation of their country reports. Almost 600 contributors were registered on the FRA Platform by the end of the data-collection process and contributed directly to the preparation of the country reports.

To further contribute to the streamlining of forest-related data-collection and reporting processes and to increase awareness of FAO's mandate to support and coordinate them, FAO convened six webinars targeting countries in Southeast Asia, West and Central Africa and Mesoamerica with the aim of increasing awareness of the FRA reporting process and its links to other reporting processes, including in the context of the Enhanced Transparency Framework and the SDGs. The webinars facilitated the exchange of information and knowledge among national focal points for the UNFCCC and the SDGs, among others. In total, 232 participants attended these webinars from 44 institutions in 24 countries (FAO, 2021).

Capacity development and open dialogue among the FRA national correspondents and FAO are key factors in delivering successful FRAs and ensuring consistency and continuity. At its twenty-third and twenty-fourth sessions in 2016 and 2018, the FAO Committee on Forestry recommended that FAO "supports the countries in strengthening collection, analysis and dissemination of forest data with a view to support the national SDG indicator framework and country reports", "continues to explore new and innovative tools and techniques to further improve support to Members in collecting, analysing and reporting data on forest and related aspects" and "supports countries with tools, methodologies and capacity-building for generating better information and data on forests' contribution to the SDGs" (FAO, 2016, 2018b).

In response to these recommendations, greater emphasis was placed on capacity development for FRA 2025. Most regions benefited from two regional workshops (double the number convened for FRA 2020), one on building capacity to interpret FRA terms and definitions and to access and use the FRA reporting platform for data entry and documentation and the other on reviewing, finalizing and submitting the country reports. Annex 1 provides a list of the workshops convened.

Doubling the number of regional workshops increased the efficiency of the reporting process by enabling the national correspondents to focus on the reporting task.

Box 9. FAO Remote Sensing Survey, 2025

Since 1990, Global Forest Resources Assessments (FRAs) have analysed global and regional status and trends for key forest attributes – such as forest area and changes in forest area – with data collected by remote sensing to complement information obtained through the country reporting process.

In FRA 2020, FAO introduced its novel participatory Remote Sensing Survey (RSS), which focused on enhancing the capacity of countries to produce high-quality data by combining local expertise with easy-to-use image interpretation tools to enable simultaneous access to the latest freely available remote-sensing data sources. More than 800 experts from 126 countries were trained at 34 national and regional workshops in the use of the RSS methodology to collect data from 400 000 samples. The results were published in 2022 and presented at the XV World Forestry Congress,[i] and the data were used in two complementary publications, *The World's Mangroves 2000–2020*[ii] and *How Much do Large-scale and Small-scale Farming Contribute to Global Deforestation?*.[iii]

The FRA 2025 RSS builds on the experience gained in the FRA 2020 RSS and updates the results. Data-collection workshops in participating countries began in May 2024 and continued in 2025. In addition to the variables collected in the FRA 2020 RSS, in the present cycle FAO is piloting the gathering of additional information – on agroforestry systems, pastoral systems, crop types, burned forest, mangroves, and trees outside forests. The efficiency of the methodology has been increased by reducing the number of samples to about 300 000.

The RSS process strengthens the FRA in many ways. It assists countries in accessing and using the latest remote-sensing data and tools for national assessments. It provides representative data on crucial attributes such as deforestation, which may not always be available consistently through country reports. And it generates independent reference data based on a harmonized methodology and the most up-to-date data sources, facilitating both regional and global comparisons. Examples of added value produced by the FRA RSS 2020 include information on deforestation drivers, the effect of the scale of agricultural activities on their impacts on land-use change, and an early indication of a change in the trend in forest loss in Africa, which has now been confirmed by the country reporting process, as reported in the present publication.

The results of the FRA 2025 RSS will be published in 2026.

Sources: [i] FAO. 2022. *FRA 2020 Remote Sensing Survey*. FAO Forestry Paper 186. Rome. https://doi.org/10.4060/cb9970en. [ii] FAO. 2023. *The world's mangroves 2000–2020.* Rome. https://doi.org/10.4060/cc7044en. [iii] Branthomme, A., Merle, C., Kindgard, A., Lourenço, A., Ng, W.-T., D'Annunzio, R. & Shapiro, A. 2023. *How much do large-scale and small-scale farming contribute to global deforestation? Results from a remote sensing pilot approach*. Rome, FAO. https://doi.org/10.4060/cc5723en

Simultaneously, the national correspondents benefited from the assistance of a dedicated team of FAO reviewers, which was available to address any issues encountered. In total, 299 experts among national correspondents and their alternates and collaborators from 157 countries participated in the workshops. Twenty-seven percent of attendees were female, up from 17 percent for FRA 2020.

In addition to the workshops convened as part of the country reporting process, FAO initiated a cycle of capacity development and data collection for the participatory FRA Remote Sensing Survey (RSS) in 2023. The objective of the FRA RSS is to assist countries in using the latest remote-sensing data and tools for their analyses and to collect data to generate up-to-date independent estimates of forest area and forest-area change and its drivers at the regional and global levels and for global ecological zones (Box 9; Box 10).

Reducing the reporting burden

As FRAs have become more comprehensive, the amount of information requested from FAO Members has increased substantially. The number of variables collected increased from 45 for FRA 2005, to about 90 for FRA 2010, to about 120 for FRA 2015. The reporting burden on countries has also been exacerbated by requests for the same or similar data in other forest-related reporting processes.

A recurring recommendation for FRAs and similar processes has been to reduce the reporting burden on countries and increase the quality and transparency of the reported data. This was done for the first time for FRA 2020, with the number of variables collected cut to about 60. FRA 2025 has continued in this vein, with about 50 broad variables, thereby further reducing the reporting burden while also making FRA data more consistent, transparent and relevant. The reporting burden has been further

Box 10. The evolution of remote sensing in Global Forest Resources Assessments

The use of remote sensing in forestry dates back a century, when foresters first recognized the potential of aerial photographs for field work and timber surveys. The first forestry applications emerged in Europe in the 1920s and later gained momentum in Canada and the United States of America.[i]

By the late 1960s, the concept of remote sensing in forestry had expanded to the use of satellite data. This was catalysed by the launch of the National Aeronautics and Space Administration's Earth Resources Technology Satellite (later renamed Landsat-1) in 1972. Although the first forest-related applications used satellite images primarily to map forest types,[ii] the idea emerged of using the image's optical density, or tone, measured by microdensiometer, to forecast other forest characteristics.[iii] It took almost another 20 years, however, before the first applications integrating national forest inventory data and satellite remote sensing became operational.[iv]

Remote sensing was first introduced to the FAO Global Forest Resources Assessment (FRA) in the context of FRA 1990 as a response to the emerging need to provide reliable estimates of tropical deforestation. A remote-sensing survey was carried out using two-stage stratified random sampling and 117 sampling units distributed throughout the pan-tropical zone. Each sampling unit was covered by Landsat images from the target years of 1980 and 1990 and an analysis of forest and land-cover change was conducted using transparent dot grid overlays.[v]

This survey was replicated ten years later as part of FRA 2000 to obtain estimates of forest and land-cover changes for 1980–1990 and 1990–2000. Additionally, with the support of partners, FAO developed the first global map of forests and other FRA land-cover classes.[vi]

Accessing and using satellite images for these early remote-sensing surveys was a complex and costly process requiring the screening, selection, purchase and processing of imagery. The generation of the first global multi-epoch orthorectified Landsat satellite dataset and its free availability online was a substantial change that led to an unprecedented increase in downloads and use of these data.[vii] It also enabled FAO to expand its remote-sensing surveys beyond the pan-tropical region to a comprehensive global assessment covering all biomes.

The FRA 2010 Remote Sensing Survey built on this Landsat dataset, systematically selecting almost 13 500 sample tiles, one on each 1-degree intersection of latitude and longitude. The survey combined automated classification and the visual validation of results by more than 200 national experts to derive estimates of forest area and changes in tree cover and forest land use between 1990 and 2005.[viii] The survey was later updated in the context of the subsequent assessment to include estimates for 2010.[ix]

The accessibility and usability of satellite images was greatly enhanced by the adoption of open-access data policies for the complete datasets acquired by the Landsat programme, the China–Brazil Earth Resources Satellite and the European Union's Copernicus programme. Simultaneous advances in cloud-based satellite data storage and computing facilities, such as Google Earth Engine, have made these vast archives of satellite data readily available and allowed their processing into geospatial products in a fraction of the time previously required for local downloading and processing.

The open-access data pioneers have since been followed by others that have made various remote-sensing datasets available free of charge globally or for limited geographical regions. An example of this is the Satellite Data Program of Norway's International Climate and Forest Initiative, launched in 2020–2024.

These advances have enabled FAO to enhance the timeliness and efficiency of its remote-sensing surveys, which no longer depend on pre-selected images for chosen epochs but can be based on data tailored for the specific needs of the survey, supported by simultaneous access to a wide range of auxiliary information. Additionally, user-friendly interpretation tools are enabling local experts with field knowledge but no background in remote sensing to participate in image interpretation work. This, in turn, has allowed the development of a new participatory survey methodology that integrates available local land-use knowledge into the visual interpretation of hundreds of thousands of remote-sensing samples. Box 9 contains more details of the methods used for the FRA 2020 and FRA 2025 remote-sensing surveys.

The combination of freely accessible and easy-to-use remote-sensing data, tools and guidance

(Continued)

Box 10. *(Continued)*

has increased the use of remote sensing in the country reporting process described in this report. Globally, the number of countries and areas using remote sensing to assess their forest areas almost doubled between 2005 and 2020.[x] In FRA 2025, remote-sensing-based assessments were specified as the sources of 42 percent of the data entries used in reporting on the area of forest and other wooded land.

Sources:[i] E.g. Spurr, S.H. 1948. Aerial photography. *In* Forest resources of the world. *Unasylva*, 2(4); Nyyssönen, A. 1955. On the estimation of the growing stock from aerial photographs. *Communicationes Instituti Forestalis Fenniae*, 46.1: (1–57). [ii] Iverson, L.R., Graham, R.L. & Cook, E.A. 1989. Application of satellite remote sensing to forested ecosystems. *Landscape Ecology*, 3(2): 131–143. [iii] Kuusela, K. & Poso, S. 1975. Demonstration of the applicability of satellite data to forestry. *Communicationes Instituti Forestalis Fenniae*, 83:4, 1–31. [iv] Barrett, F., McRoberts, R.E., Tomppo, E., Cienciala, E. & Waser, L.T. 2016. A questionnaire-based review of the operational use of remotely sensed data by national forest inventories. *Remote Sensing of Environment*, 174: 279–289. https://doi.org/10.1016/j.rse.2015.08.029. [v] FAO. 1996. *Forest resources assessment 1990: Survey of tropical forest cover and study of change processes*. FAO Forestry Paper No. 130. Reprinted 1996. Rome. [vi] FAO. 2001. *Global Forest Resources Assessment 2000*. FAO Forestry Paper No. 140. Rome. [vii] Gutman, G., Byrnes, R.A., Masek, J., Covington, S., Justice, C., Franks, S. & Headley, R. 2008. Towards monitoring land-cover and land-use changes at a global scale: the global land survey 2005. *Photogrammetric Engineering and Remote Sensing*, 74(1): 6–10. [viii] FAO & Joint Research Centre of the European Commission (JRC). 2012. *Global forest land-use change 1990–2005*, by E.J. Lindquist, R. D'Annunzio, A. Gerrand, K. MacDicken, F. Achard, R. Beuchle, A. Brink, H.D. Eva, P. Mayaux, J. San-Miguel-Ayanz & H-J. Stibig. FAO Forestry Paper No. 169. Rome, FAO and JRC. Rome, FAO. [ix] D'Annunzio, R., Lindquist, E. & MacDicken, K. 2017. *Global forest land-use change from 1990 to 2010: An update to a global remote sensing survey of forests*. Forest Resources Assessment Working Paper No. 187. Rome, FAO. [x] Nesha, K., Herold, M., De Sy, V., Duchelle, A.E., Martius, C., Branthomme, A., Garzuglia, M., Jonsson, O. & Pekkarinen, A. 2021. An assessment of data sources, data quality and changes in national forest monitoring capacities in the Global Forest Resources Assessment 2005–2020. *Environmental Research Letters*, 16(5): 054029. https://doi.org/10.1088/1748-9326/abd81b

reduced by the pre-filling of reporting tables with the data reported for FRA 2020.

FAO has continued to improve the FRA reporting platform, which now provides easy access to the reporting tables; facilitates data and metadata entry; allows the uploading of documents for public sharing and/or internal documentation; performs additional on-the-fly validation checks; provides functionalities for data visualization and downloads; and enables direct messaging between collaborators and reviewers. FAO's collaboration with Google LLC/Google has led to the development of geospatial modules that give registered platform users access to the latest remote-sensing products and facilitates the use of these to generate estimates on, for example, tree cover, burned area, protected-forest area and mangrove area.

Improved data availability and quality

FRA 2025 estimates are based on official national statistics derived from field inventories, remote sensing, expert estimates and a combination of these. Many governments in developing countries have invested in the last decade in the development of national forest monitoring systems, often supported by donors and international organizations. FAO has assisted more than 50 national governments since 2009 to develop robust national forest inventories and satellite-based land-monitoring systems. In addition, FAO's work in Open Foris on free and open-source tools has reached more than 250 000 users in 196 countries and areas. By building on the functionalities of FAO's System for Earth Observation Data Access, Processing and Analysis for Land Monitoring system, SEPAL,[17] FAO has provided all FRA Platform users with access to customizable Landsat and Sentinel image mosaics for their visualization. Combined with FRA-specific capacity building, these efforts have had a clear positive impact on the availability and quality of information on forest resources (Nesha *et al*., 2021).

The response frequency of countries and areas for FRA 2025 was generally very good, and data availability for key variables is high. The number of reporting countries and areas increased for all variables compared with FRA 2020. Of the 18 variables shown in Figure 62,[18] the global forest area represented by reporting countries and areas exceeded 90 percent for 11 variables reporting on status. The reporting on trends in forest area exceeded 90 percent for ten of the 18 variables. The lowest data availability was for insects, diseases and severe weather events, with the countries and areas reporting on these factors representing less than half the global forest area.

FOREST-AREA DATA

To increase understanding of data quality for forest-area estimates, countries were asked to document their data sources and rank them in reliability tiers for status and trends (Table 89). For forest area status, 104 countries reported that their data were consistent with the high tier, meaning that 75 percent of their forest-area estimates for 2025 was based on recent data from a national forest

[17] See https://www.sepal.io

[18] In some cases, missing values were gap-filled to obtain complete time series for regional and global estimates. The percentages presented in Figure 62, therefore, may not always be reproduced by aggregating the reported country data.

FIGURE 62. Availability of data on status and trends for 18 main variables

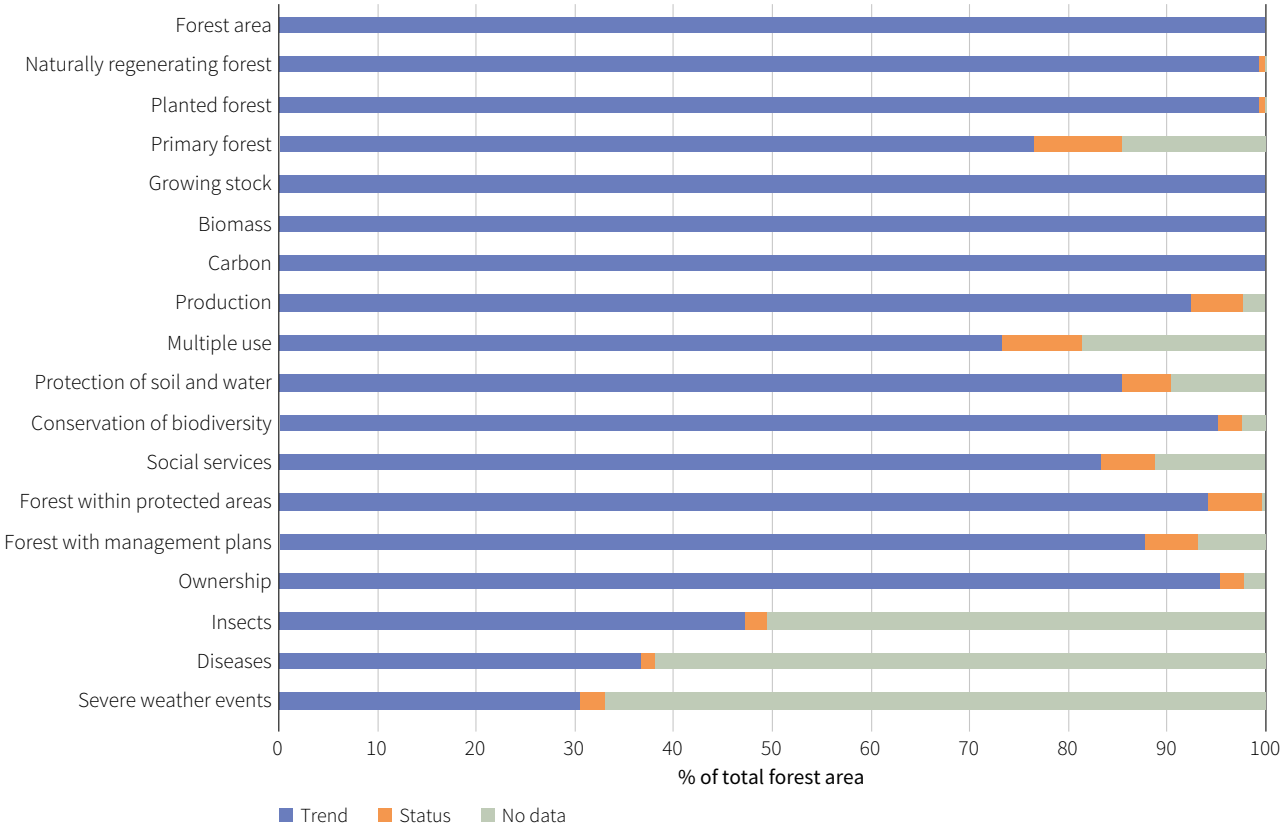
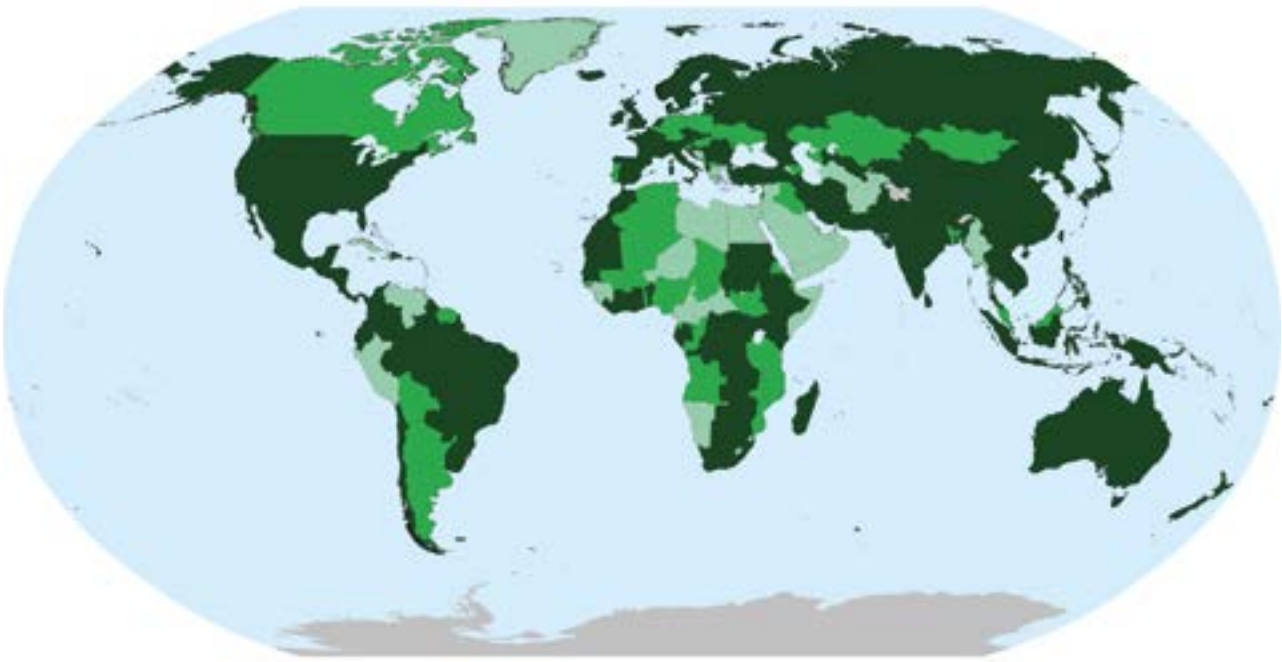


TABLE 89. Data tiers for forest-area status and trends

Region	Criteria	Tier
Status	Data sources recent – i.e. data not older than 5 years from year of submission of report (2023) for FAO Global Forest Resources Assessment (FRA) 2025 country reports. Data obtained from national forest inventory or remote sensing (sample-based survey or wall-to-wall mapping) with accuracy assessment/ field data calibration	High
	Data sources old – i.e. data older than 5 years from year of submission of report (2023) for FRA 2025 country reports. Data obtained from national forest inventory or remote sensing (sample-based survey or wall-to-wall mapping) with accuracy assessment/field data calibration	Medium
	Data sources "other" – such as registers, expert estimates or remote sensing without accuracy assessment/field data calibration	Low
Trend	Estimates based on repeated compatible (i.e. in terms of methods, categories and definitions used) national forest inventories, the most recent of which is not older than 5 years; and/or remote-sensing change assessments conducted using multitemporal analysis for a period ending not more than 5 years ago (e.g. REDD+ forest reference [emission] levels)	High
	Estimates based on repeated compatible national forest inventories where the most recent is older than 5 years; and/or remote-sensing change assessments through multitemporal analysis for a period ending more than 5 years ago; or comparison of compatible maps without multitemporal analysis	Medium
	Other data sources – e.g. expert estimates, estimates based on non-compatible assessments	Low

FIGURE 63. Data tiers for forest-area status, 2025



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

inventory or remote sensing, with accuracy assessment or field-data calibration. Another 62 countries, representing 19 percent of the forest area, based their forest-area estimates on data that were more than five years old at the time of submission (i.e. 2023), thus assigning them to the medium tier. The remaining 70 countries, representing 6 percent of the global forest area, were assigned to the low tier (Figure 63).

Eighty-eight countries representing more than half (52 percent) of the world's forest area based their trend estimates on repeated compatible national forest inventories, of which the most recent was not older than five years, and/or remote-sensing change assessments using multitemporal analysis for a period ending not more than five years before the date of submission (high tier). Fifty-six countries representing 41 percent of the global forest area reported that their trend estimates were in the medium tier of accuracy, and the remaining 92 countries (representing 7 percent of the total forest area) estimated forest-area trends based on expert opinion or incompatible datasets (i.e. the low tier) (Figure 64).

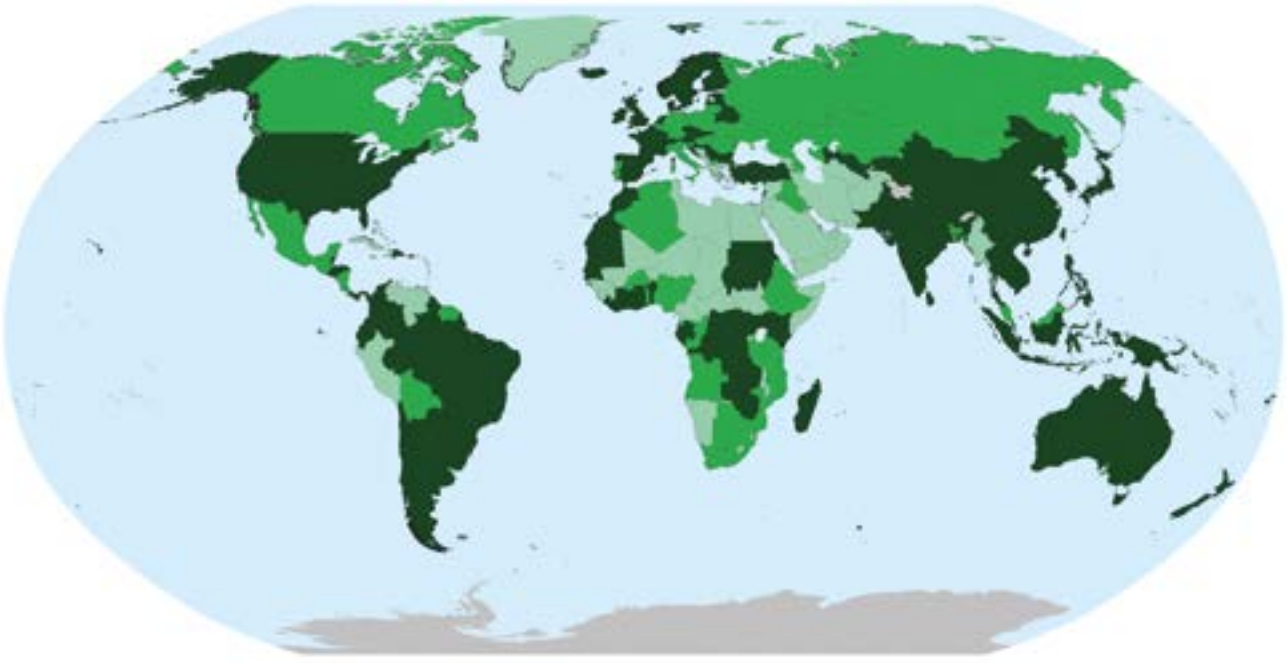
GROWING-STOCK DATA

A three-class tier system was applied by countries and areas to indicate differences in data used for reporting on growing-stock status (Table 90). In 2025, data on growing stock for 33 percent of the countries and areas representing two-thirds of the world's forest area were assessed as high-tier. The proportion of countries and areas – and of

TABLE 90. Data tiers for forest growing stock

Criteria	Tier
Recent (data not older than 10 years from year of submission of report – i.e. 2013 or more recent for Global Forest Resources Assessment (FRA) 2025 country reports) – national forest inventory or airborne laser scanning with probabilistic ground samples	High
Old (data older than 10 years from year of submission of report – i.e. older than 2013 for FRA 2025 country reports) – national forest inventory, partial field inventories or airborne laser scanning without probabilistic ground samples	Medium
Other – such as satellite data, registers, questionnaires or expert assessments	Low

FIGURE 64. Data tiers for forest-area trends, 1990–2025



Tiers: High Medium Low No data

Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

forest area – with high-tier data is relatively high in East Asia and Europe and comparatively low in Africa and Oceania (Figure 65).

A comparison with FRA 2020 indicates a significant improvement in reporting coverage for FRA 2025, with an increase in both the number of countries and areas reporting on growing stock (from 183 in FRA 2020 to 216 in FRA 2025) and in the forest area represented across all growing-stock variables. Nevertheless, the tier analysis also shows that both the number of reporting countries and areas and the proportion of forest area assessed as high-tier declined in FRA 2025 compared with FRA 2020. Unlike in FRA 2020, the tier assessment for FRA 2025 was carried out directly by the reporting countries and areas. Further analysis is required to determine whether the apparent decline reflects this change (or other changes) in the tier assessment methodology or an actual negative trend in the quality of data sources for growing-stock assessment, such as a lack of updates of national forest inventories.

BIOMASS DATA

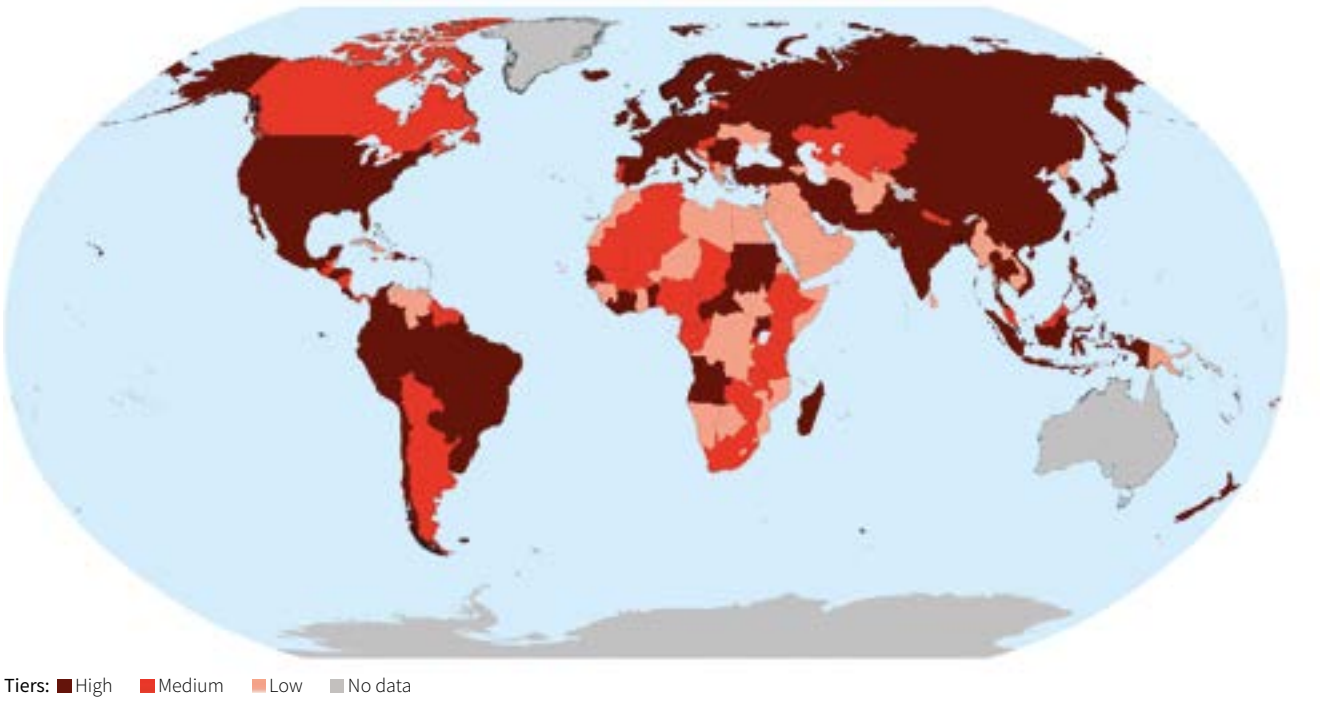
A three-class tier system was applied by countries and areas to evaluate the quality of data used for reporting on biomass (Table 91). In 2025, 28 percent of countries and areas representing nearly two-thirds of the forest area used high-tier data for biomass reporting. High-tier coverage was most prevalent in Europe and least prevalent in Africa (Figure 66).

The number of countries and areas reporting on biomass increased from 193 in FRA 2020 to 216 in FRA 2025. There was, however, a decline in the proportion of forest area covered by high-tier data, despite an increase in the

TABLE 91. Data tiers for biomass

Criteria	Tier
Country-specific biomass conversion and expansion factors (BCEFs) or allometric equations applied	High
Generic or biome-level allometric equations or a combination of country- or biome-specific conversion factors and Intergovernmental Panel on Climate Change (IPCC) default biomass expansion factors applied	Medium
IPCC default BCEFs applied (e.g. using the "biomass calculator"), or estimates based on remote-sensing biomass maps	Low

FIGURE 65. Data tiers for growing-stock status, 2025



Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

number of countries and areas using high-tier methods. Further investigation is needed to determine whether the observed trends reflect an actual decline in data quality or methodological changes in tier assessment.

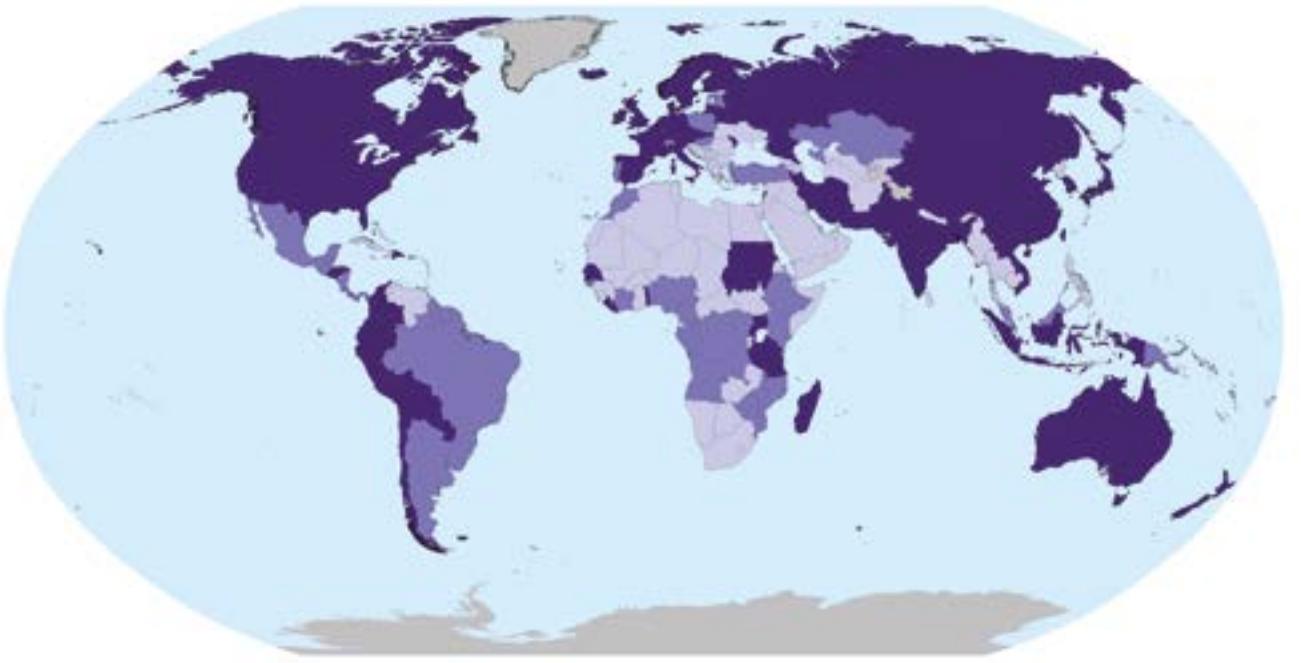
VOLUNTARY REPORT UPDATES

The recently introduced possibility for countries and areas to make voluntary FRA report updates within the regular five-year FRA reporting cycles is significant for data availability. Allowing voluntary data updates is a direct response to a request made at the twenty-fifth session of the Committee on Forestry to develop a flexible FRA reporting process that allows voluntary updates of key indicators related to SDG 15 and other indicators, at the discretion of Members.

Implementation of the voluntary update process and the preparation of related guidance has included a revision of the terms of reference of national correspondents, an updated process for the review of the reports, and a streamlined validation process. The FRA Platform has also been adjusted to facilitate voluntary updates, thus helping build a more dynamic and responsive global forest information system that can better serve the needs of countries, researchers and the international community.

The transition to a more flexible reporting process has several benefits. It allows the reports to be updated and shared with a global audience as new information becomes available; supports the timely monitoring of progress towards the SDGs and other jointly agreed global goals and targets; and allows the more rapid communication of important changes and trends. This flexibility in FRA reporting is likely to be increasingly important, given emerging needs for frequent reporting on key variables and indicators such as the two forest-related SDG indicators, which also have strong linkages with other global initiatives and commitments. In collaboration with FAO Members, the FRA Advisory Group, Collaborative Forest Resources Questionnaire partners, and others, FRA will continue to evolve as a dynamic and transparent reporting process that provides easy access to high-quality, up-to-date data.

FIGURE 66. Data tiers for biomass status, 2025



Tiers: High Medium Low No data

Note: Refer to the disclaimer on page ii for the names and boundaries used in this map. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

Next steps

The aims behind the changes introduced to FRA 2025 are to reduce the reporting burden on countries and areas and improve data availability and consistency. Future FRAs will continue working with partners to achieve these objectives and increase synergies with other forest-related processes and thus assist national and international policy formulation and decision-making processes. The focus will also be maintained on the transparency and traceability of estimates and the quality and usability of the data published.

As requested by FAO governing bodies, FAO will continue to produce comprehensive FRAs every five years. Joint planning for the next global assessment cycle (FRA 2030) will begin in 2026 after an in-depth evaluation of FRA 2025. As per well-established practice, the scope and other technical aspects will be finalized via an expert consultation in 2026 or 2027.

FAO will continue to invite countries and areas to update their reports on a voluntary basis as new information becomes available. The plan is to publish the first updates in early 2026 through the FRA Platform and, for specific indicators, as part of SDG reporting.

Annexes

Annex 1. List of Global Forest Resources Assessment 2025 regional workshops

FRA 2025 workshop	Venue	Date
Caribbean	Bridgetown, Barbados	28 February 2023–2 March 2023
Latin America (first)	Panama City, Panama	27 March 2023–30 March 2023
Asia (first)	Bangkok, Thailand	4 April 2023–7 April 2023
Anglophone Africa (first)	Hwange, Zimbabwe	25 April 2023–27 April 2023
Pacific	Nadi, Fiji	8 May 2023–10 May 2023
Canada and the United States of America	Virtual (1 session)	15 May 2023
Near East and North Africa	Amman, Jordan	29 May 2023–2 June 2023
Francophone Africa (first)	Virtual (7 sessions)	13 June 2023–25 June 2023
Latin America (second)	Quito, Ecuador	4 September 2023–7 September 2023
Forest Europe signatory countries	Helsinki, Finland	11 September 2023–13 September 2023
Francophone Africa (second)	Grand Bassam, Côte d'Ivoire	18 September 2023–22 September 2023
Anglophone Africa (second)	Port Louis, Mauritius	26 September 2023–29 September 2023
UNECE/FAO Caucasus, Central Asia and Eastern Europe	Bishkek, Kyrgyzstan	10 October 2023–13 October 2023
Asia (second)	Tokyo, Japan	30 October 2023–2 November 2023

More information on the workshops is available at: https://www.fao.org/forest-resources-assessment/fra-2025-regional-workshops/en/

Annex 2. Statistical factsheets

WORLD
236 countries and areas

Variable (unit)	1990	2000	2010	2015	2020	2025[a]	Data availability (%)[b]
Extent of forest							
Forest area (million ha)	4 344	4 237	4 201	4 181	4 165	4 140	100
Naturally regenerating forest (million ha)	4 133	3 994	3 915	3 878	3 843	3 808	99
Planted forest (million ha)	184	215	258	275	294	304	99
… of which plantation forest (million ha)	86	102	130	140	152	157	99
Primary forest (million ha)	1 238	1 203	1 160	1 144	1 135	1 128	77
Mangroves (million ha)	15.3	15.0	14.9	14.9	15.1	15.5	96
Forest in protected areas (million ha)	507	567	684	717	733	758	94
Forest area with management plans (million ha)	1 711	1 801	1 930	1 992	2 046	2 076	88
Growing stock and carbon stock in forest							
Growing stock (billion m^3)	597	592	606	614	617	630	100[c]
Growing stock (m^3/ha)	137	140	144	147	148	152	100[c]
Carbon stock in biomass (Gt)[d]	310	307	309	311	312	313	100[c]
Carbon stock in biomass (t/ha)[d]	71	72	73	74	75	76	100[c]
Total carbon stock (Gt)	716	706	710	712	713	714	100[c]
Total carbon stock (t/ha)	165	167	169	170	171	172	100[c]
Designated management objective							
Production (million ha)	1 206	1 179	1 157	1 157	1 188	1 176	92
Protection of soil and water (million ha)	243	268	303	302	369	366	85
Conservation (million ha)	87.7	84.6	88.3	85.4	91.0	89.4	95
Social services (million ha)	142	151	168	182	207	221	83
Multiple use (million ha)	706	692	704	688	683	608	73
Other (million ha)	317	346	324	330	224	290	85
Forest ownership							
Private (%)	22	22	22	23	23		100
Public (%)	71	73	72	72	73		100
Other/unknown (%)	7	6	5	5	4		100

Notes:
[a] Data for 2025 comprise countries and territories that reported complete time series of data, and values may differ from those presented in the report based on the analysis of exclusively 2025 data.
[b] Data availability refers to the proportion of total forest area represented by reporting countries and territories.
[c] Missing values have been filled with FAO estimates.
[d] Biomass comprises aboveground and belowground biomass.

AFRICA
58 countries and areas

Variable (unit)	1990	2000	2010	2015	2020	2025[a]	Data availability (%)[b]
Extent of forest							
Forest area (million ha)	780	747	713	692	677	663	100
Naturally regenerating forest (million ha)	771	737	702	680	664	649	100
Planted forest (million ha)	8.9	9.9	11.3	12.2	13.3	14.1	100
… of which plantation forest (million ha)	8.2	8.9	9.8	10.3	11.2	11.8	100
Primary forest (million ha)	191	184	175	169	166	163	64
Mangroves (million ha)	3.31	3.24	3.24	3.31	3.25	3.28	99
Forest in protected areas (million ha)	119	122	135	144	146	154	99
Forest area with management plans (million ha)	75	73	92	112	125	143	78
Growing stock and carbon stock in forest							
Growing stock (billion m^3)	99	95	91	88	87	85	100[c]
Growing stock (m^3/ha)	127	127	127	127	128	128	100[c]
Carbon stock in biomass (Gt)[d]	65	63	60	59	57	57	100[c]
Carbon stock in biomass (t/ha)[d]	84	84	85	85	85	85	100[c]
Total carbon stock (Gt)	132	127	122	118	116	115	100[c]
Total carbon stock (t/ha)	169	170	171	171	172	173	100[c]
Designated management objective							
Production (million ha)	129	132	109	113	106	102	95
Protection of soil and water (million ha)	31.6	30.6	28.7	26.4	28.2	28.5	92
Conservation (million ha)	321	339	383	402	420	440	94
Social services (million ha)	3.3	3.2	3.2	3.2	3.9	4.4	71
Multiple use (million ha)	315	300	298	278	268	260	72
Other (million ha)	0	0	0	0	0	0	70
Forest ownership							
Private (%)	9	9	9	9	9		100
Public (%)	84	85	84	84	82		100
Other/unknown (%)	7	6	7	7	9		100

Notes:
[a] Data for 2025 comprise countries and territories that reported complete time series of data, and values may differ from those presented in the report based on the analysis of exclusively 2025 data.
[b] Data availability refers to the proportion of total forest area represented by reporting countries and territories.
[c] Missing values have been filled with FAO estimates.
[d] Biomass comprises aboveground and belowground biomass.

ASIA
48 countries and areas

Variable (unit)	1990	2000	2010	2015	2020	2025[a]	Data availability (%)[b]
Extent of forest							
Forest area (million ha)	582	578	605	614	624	630	100
Naturally regenerating forest (million ha)	497	480	486	486	483	484	100
Planted forest (million ha)	85	98	120	128	141	146	100
… of which plantation forest (million ha)	58	68	85	90	100	104	100
Primary forest (million ha)	95	85	81	80	82	82	88
Mangroves (million ha)	6.03	6.10	5.85	5.66	5.69	6.10	96
Forest in protected areas (million ha)	100	119	145	148	152	154	95
Forest area with management plans (million ha)	228	289	318	339	364	365	90
Growing stock and carbon stock in forest							
Growing stock (billion m^3)	59	58	63	66	70	72	100[c]
Growing stock (m^3/ha)	102	100	105	108	112	114	100[c]
Carbon stock in biomass (Gt)[d]	35	34	36	38	40	41	100[c]
Carbon stock in biomass (t/ha)[d]	61	59	60	61	63	65	100[c]
Total carbon stock (Gt)	89	86	91	93	95	97	100[c]
Total carbon stock (t/ha)	153	149	150	151	153	154	100[c]
Designated management objective							
Production (million ha)	232	221	201	199	190	192	95
Protection of soil and water (million ha)	95	106	127	127	124	124	95
Conservation (million ha)	108	109	112	120	121	122	95
Social services (million ha)	3.7	3.6	4.6	5.1	21.4	25.7	94
Multiple use (million ha)	148	148	158	165	168	165	93
Other (million ha)	30.0	30.4	31.1	31.0	31.9	32.8	96
Forest ownership							
Private (%)	16	16	22	24	23		100
Public (%)	84	84	78	76	77		100
Other/unknown (%)	0	0	0	0	0		100

Notes:
[a] Data for 2025 comprise countries and territories that reported complete time series of data, and values may differ from those presented in the report based on the analysis of exclusively 2025 data.
[b] Data availability refers to the proportion of total forest area represented by reporting countries and territories.
[c] Missing values have been filled with FAO estimates.
[d] Biomass comprises aboveground and belowground biomass.

EUROPE
50 countries and areas

Variable (unit)	1990	2000	2010	2015	2020	2025[a]	Data availability (%)[b]
Extent of forest							
Forest area (million ha)	998	1 006	1 021	1 025	1 033	1 039	100
Naturally regenerating forest (million ha)	913	916	925	927	934	939	97
Planted forest (million ha)	57	62	68	70	71	71	97
… of which plantation forest (million ha)	3.6	4.0	4.4	4.2	4.1	4.1	97
Primary forest (million ha)	304	305	308	309	309	310	91
Mangroves (million ha)	0	0	0	0	0	0	100
Forest in protected areas (million ha)	164	178	203	214	219	227	96
Forest area with management plans (million ha)	932	935	942	947	956	962	96
Growing stock and carbon stock in forest							
Growing stock (billion m^3)	115	127	140	145	150	162	100[c]
Growing stock (m^3/ha)	115	126	137	142	145	155	100[c]
Carbon stock in biomass (Gt)[d]	44	49	53	55	57	59	100[c]
Carbon stock in biomass (t/ha)[d]	44	48	52	54	55	57	100[c]
Total carbon stock (Gt)	149	154	161	164	167	169	100[c]
Total carbon stock (t/ha)	149	153	158	160	161	163	100[c]
Designated management objective							
Production (million ha)	539	500	510	502	544	547	98
Protection of soil and water (million ha)	76	90	106	107	172	173	97
Conservation (million ha)	45.5	47.2	62.5	68.5	74.3	79.5	98
Social services (million ha)	24.4	17.1	17.9	18.0	19.0	19.1	97
Multiple use (million ha)	34.9	35.6	38.1	37.8	40.9	41.5	97
Other (million ha)	277	304	281	286	180	181	97
Forest ownership							
Private (%)	8	9	10	10	10		100
Public (%)	90	89	89	89	89		100
Other/unknown (%)	2	2	1	1	1		100

Notes:
[a] Data for 2025 comprise countries and territories that reported complete time series of data, and values may differ from those presented in the report based on the analysis of exclusively 2025 data.
[b] Data availability refers to the proportion of total forest area represented by reporting countries and territories.
[c] Missing values have been filled with FAO estimates.
[d] Biomass comprises aboveground and belowground biomass.

NORTH AND CENTRAL AMERICA
41 countries and areas

Variable (unit)	1990	2000	2010	2015	2020	2025[a]	Data availability (%)[b]
Extent of forest							
Forest area (million ha)	771	768	776	779	778	776	100
Naturally regenerating forest (million ha)	748	735	735	735	730	726	100
Planted forest (million ha)	23.1	32.7	40.8	44.0	47.4	49.8	100
… of which plantation forest (million ha)	6.4	9.2	13.3	14.0	15.2	15.4	100
Primary forest (million ha)	266	261	245	238	235	235	57
Mangroves (million ha)	2.32	2.32	2.35	2.34	2.35	2.38	100
Forest in protected areas (million ha)	42.0	51.5	72.5	73.8	76.8	81.1	98
Forest area with management plans (million ha)	415	426	440	449	447	447	97
Growing stock and carbon stock in forest							
Growing stock (billion m^3)	90	92	98	101	101	105	100[c]
Growing stock (m^3/ha)	117	119	126	130	130	135	100[c]
Carbon stock in biomass (Gt)[d]	42	43	45	46	47	47	100[c]
Carbon stock in biomass (t/ha)[d]	54	57	58	60	61	61	100[c]
Total carbon stock (Gt)	145	148	152	153	154	155	100[c]
Total carbon stock (t/ha)	189	192	196	197	198	199	100[c]
Designated management objective							
Production (million ha)	208	219	229	231	236	222	90
Protection of soil and water (million ha)	16.9	17.2	18.0	18.3	22.0	15.9	89
Conservation (million ha)	18.4	29.0	35.2	40.8	42.8	43.6	97
Social services (million ha)	15.2	15.3	15.5	15.6	19.0	18.0	96
Multiple use (million ha)	178	178	177	176	174	113	88
Other (million ha)	1.0	1.0	1.0	1.0	1.0	64.8	88
Forest ownership							
Private (%)	34	34	34	34	34		100
Public (%)	60	60	61	61	61		100
Other/unknown (%)	6	6	6	5	5		100

Notes:
[a] Data for 2025 comprise countries and territories that reported complete time series of data, and values may differ from those presented in the report based on the analysis of exclusively 2025 data.
[b] Data availability refers to the proportion of total forest area represented by reporting countries and territories.
[c] Missing values have been filled with FAO estimates.
[d] Biomass comprises aboveground and belowground biomass.

OCEANIA
25 countries and areas

Variable (unit)	1990	2000	2010	2015	2020	2025[a]	Data availability (%)[b]
Extent of forest							
Forest area (million ha)	184	183	181	182	183	184	100
Naturally regenerating forest (million ha)	182	179	176	178	179	179	100
Planted forest (million ha)	2.84	3.84	4.71	4.69	4.62	4.92	100
… of which plantation forest (million ha)	2.81	3.81	4.37	4.35	4.28	4.55	100
Primary forest (million ha)	39.1	38.9	38.8	38.6	38.5	38.3	99
Mangroves (million ha)	1.48	1.21	1.34	1.28	1.54	1.54	100
Forest in protected areas (million ha)	19.2	22.6	27.6	28.9	29.1	29.1	98
Forest area with management plans (million ha)	11.4	12.1	12.5	12.4	12.5	12.5	24
Growing stock and carbon stock in forest							
Growing stock (billion m^3)	22	22	22	22	22	22	100[c]
Growing stock (m^3/ha)	119	120	121	121	121	120	100[c]
Carbon stock in biomass (Gt)[d]	16	16	16	16	16	16	100[c]
Carbon stock in biomass (t/ha)[d]	86	86	87	86	86	86	100[c]
Total carbon stock (Gt)	35	35	35	35	35	35	100[c]
Total carbon stock (t/ha)	190	191	191	191	190	190	100[c]
Designated management objective							
Production (million ha)	8.7	9.5	9.9	9.9	9.7	9.6	99
Protection of soil and water (million ha)	1.8	1.8	1.8	1.8	1.8	1.8	27
Conservation (million ha)	40.0	45.0	55.2	59.0	61.6	76.2	99
Social services (million ha)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	26
Multiple use (million ha)	13.8	11.5	13.5	12.2	12.4	12.4	99
Other (million ha)	0	0	0	0	0	0	99
Forest ownership							
Private (%)	43	41	43	47	47		100
Public (%)	56	58	57	53	53		100
Other/unknown (%)	1	2	1	1	0		100

Notes:
[a] Data for 2025 comprise countries and territories that reported complete time series of data, and values may differ from those presented in the report based on the analysis of exclusively 2025 data.
[b] Data availability refers to the proportion of total forest area represented by reporting countries and territories.
[c] Missing values have been filled with FAO estimates.
[d] Biomass comprises aboveground and belowground biomass.

SOUTH AMERICA
14 countries and areas

Variable (unit)	1990	2000	2010	2015	2020	2025[a]	Data availability (%)[b]
Extent of forest							
Forest area (million ha)	1 028	955	906	890	870	849	100
Naturally regenerating forest (million ha)	1 022	946	892	872	853	831	100
Planted forest (million ha)	6.6	8.6	13.9	17.2	17.2	17.3	100
… of which plantation forest (million ha)	6.6	8.6	13.9	17.1	17.2	17.3	100
Primary forest (million ha)	342	329	313	309	303	299	72
Mangroves (million ha)	2.21	2.17	2.09	2.28	2.26	2.23	85
Forest in protected areas (million ha)	63	73	102	108	110	112	84
Forest area with management plans (million ha)	50	65	125	134	141	147	90
Growing stock and carbon stock in forest							
Growing stock (billion m^3)	211	200	192	191	188	184	100[c]
Growing stock (m^3/ha)	205	209	212	214	216	217	100[c]
Carbon stock in biomass (Gt)[d]	107	101	97	97	95	93	100[c]
Carbon stock in biomass (t/ha)[d]	104	106	108	109	109	110	100[c]
Total carbon stock (Gt)	166	157	150	149	146	143	100[c]
Total carbon stock (t/ha)	161	164	166	167	168	169	100[c]
Designated management objective							
Production (million ha)	89	97	98	102	102	103	83
Protection of soil and water (million ha)	21.7	21.8	20.8	20.9	21.1	22.7	69
Conservation (million ha)	21.6	24.2	30.0	28.7	29.3	29.3	90
Social services (million ha)	95	112	127	140	143	154	69
Multiple use (million ha)	15.5	19.0	18.6	19.6	19.2	16.0	12
Other (million ha)	9.3	11.1	11.1	11.2	11.1	11.2	69
Forest ownership							
Private (%)	38	35	33	32	34		100
Public (%)	44	52	54	56	58		100
Other/unknown (%)	18	14	13	12	8		100

Notes:
[a] Data for 2025 comprise countries and territories that reported complete time series of data, and values may differ from those presented in the report based on the analysis of exclusively 2025 data.
[b] Data availability refers to the proportion of total forest area represented by reporting countries and territories.
[c] Missing values have been filled with FAO estimates.
[d] Biomass comprises aboveground and belowground biomass.

Annex 3. Global tables

TABLE A1. Extent of forest, 1990–2025

Country/areas	Forest area (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Afghanistan	1 209	1 209	1 209	1 209	1 209	1 209	0.0	0.00	0.0	0.00	0.0	0.00
Albania	789	769	782	797	941	941	−2.0	−0.25	1.9	0.24	14.4	1.67
Algeria	1 715	1 708	1 701	1 698	1 695	1 691	−0.7	−0.04	−0.7	−0.04	−0.7	−0.04
American Samoa	18	18	16	16	16	16	n.s.	−0.19	−0.1	−0.74	0.0	0.00
Andorra	18	17	18	18	18	18	n.s.	−0.23	0.1	0.38	n.s.	−0.04
Angola	77 533	76 013	70 913	68 363	65 812	63 262	−152.0	−0.20	−510.0	−0.70	−510.0	−0.77
Anguilla	6	6	6	6	6	6	0.0	0.00	0.0	0.00	0.0	0.00
Antigua and Barbuda	10	9	9	8	8	8	−0.1	−0.67	−0.1	−0.74	−0.1	−0.81
Argentina	55 990	53 442	49 727	48 444	47 496	46 598	−254.7	−0.46	−333.2	−0.65	−184.6	−0.39
Armenia	335	333	332	334	334	334	−0.2	−0.06	0.1	0.03	n.s.	n.s.
Aruba	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Ascension, Saint Helena and Tristan da Cunha	2	2	2	2	2	2	0.0	0.00	0.0	0.00	0.0	0.00
Australia	134 575	132 907	131 171	132 508	133 291	133 562	−166.7	−0.12	−26.7	−0.02	105.4	0.08
Austria	3 776	3 838	3 862	3 876	3 890	3 904	6.2	0.16	2.5	0.06	2.8	0.07
Azerbaijan	945	987	1 032	1 078	1 161	1 214	4.2	0.44	6.0	0.59	13.6	1.19
Bahamas	510	510	510	510	510	510	0.0	0.00	0.0	0.00	0.0	0.00
Bahrain	1	1	1	1	2	4	0.0	0.00	0.0	0.00	0.3	12.30
Bangladesh	1 985	1 920	1 888	1 883	1 878	1 873	−6.5	−0.33	−2.5	−0.13	−1.0	−0.05
Barbados	6	6	6	6	6	6	0.0	0.00	0.0	0.00	0.0	0.00
Belarus	7 780	8 273	8 630	8 634	8 843	8 975	49.3	0.62	24.0	0.28	34.2	0.39
Belgium	677	667	690	689	671	671	−1.0	−0.15	1.5	0.22	−1.9	−0.28
Belize	1 580	1 504	1 428	1 390	1 353	1 315	−7.6	−0.49	−7.6	−0.52	−7.5	−0.56
Benin	6 980	5 674	4 264	3 507	3 320	3 133	−130.6	−2.05	−144.5	−3.16	−37.4	−1.12
Bermuda	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Bhutan	2 507	2 606	2 705	2 715	2 717	2 675	9.9	0.39	7.3	0.27	−4.0	−0.15
Bolivia (Plurinational State of)	61 774	59 086	57 500	56 687	55 569	54 370	−268.8	−0.44	−159.9	−0.28	−231.7	−0.42
Bonaire, Sint Eustatius and Saba	4	4	4	4	4	4	0.0	0.00	0.0	0.00	0.0	0.00
Bosnia and Herzegovina	2 210	2 112	2 103	2 161	2 157	2 162	−9.8	−0.45	3.3	0.15	0.2	0.01
Botswana	15 728	15 728	15 728	15 728	15 730	15 730	0.0	0.00	0.0	0.00	0.2	n.s.
Brazil	618 443	560 720	525 087	515 509	502 367	486 087	−5 772.3	−0.98	−3 014.1	−0.56	−2 942.2	−0.59
British Virgin Islands	10	10	10	10	10	10	n.s.	−0.01	n.s.	−0.01	0.0	0.00

(Continued)

TABLE A1 *(Continued)*

Country/areas	Forest area (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Brunei Darussalam	413	397	380	380	380	380	−1.6	−0.39	−1.1	−0.29	0.0	0.00
Bulgaria	3 327	3 375	3 737	3 833	3 896	3 959	4.8	0.14	30.5	0.85	12.6	0.32
Burkina Faso	8 299	6 378	5 035	4 436	3 836	3 237	−192.1	−2.60	−129.5	−2.39	−119.9	−3.10
Burundi	276	194	194	280	280	280	−8.3	−3.48	5.7	2.47	0.0	0.00
Cabo Verde	34	38	42	45	48	51	0.4	1.24	0.5	1.13	0.6	1.30
Cambodia	11 005	10 781	10 589	8 847	7 877	6 333	−22.4	−0.21	−128.9	−1.31	−251.4	−3.29
Cameroon	22 500	21 597	20 900	20 620	19 728	19 143	−90.3	−0.41	−65.1	−0.31	−147.7	−0.74
Canada	360 777	360 305	365 431	367 994	368 868	368 819	−47.2	−0.01	512.6	0.14	82.5	0.02
Cayman Islands	13	13	13	13	13	13	n.s.	−0.15	n.s.	−0.11	0.0	0.00
Central African Republic	46 435	46 085	45 735	45 560	45 327	45 095	−35.0	−0.08	−35.0	−0.08	−46.5	−0.10
Chad	6 730	6 353	5 530	4 890	4 251	3 611	−37.7	−0.58	−97.5	−1.73	−127.9	−2.99
Chile	16 811	17 425	18 038	18 217	18 186	18 162	61.4	0.36	52.8	0.30	−5.5	−0.03
China	157 141	177 001	200 610	210 294	219 098	227 153	1 986.0	1.20	2 219.6	1.16	1 685.9	0.77
Colombia	65 103	62 570	61 432	60 964	60 123	59 457	−253.2	−0.40	−107.1	−0.17	−150.7	−0.25
Comoros	47	43	37	35	33	33	−0.4	−0.97	−0.5	−1.41	−0.1	−0.35
Congo	22 255	22 135	22 015	21 913	21 784	21 854	−12.0	−0.05	−14.8	−0.07	−6.0	−0.03
Cook Islands	15	16	16	16	16	16	0.1	0.43	n.s.	0.01	0.0	0.00
Costa Rica	2 759	2 849	2 881	2 954	2 972	2 990	9.0	0.32	7.0	0.24	3.5	0.12
Côte d'Ivoire	8 297	6 163	4 998	4 449	4 178	3 774	−213.4	−2.93	−114.3	−2.15	−67.4	−1.63
Croatia	1 850	1 885	1 920	1 922	1 940	1 946	3.5	0.19	2.5	0.13	2.4	0.13
Cuba	2 312	2 699	3 209	3 519	3 611	3 622	38.7	1.56	54.7	1.78	10.3	0.29
Curaçao	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Cyprus	161	172	173	173	173	172	1.1	0.63	0.1	0.04	−0.1	−0.06
Czechia	2 839	2 865	2 880	2 893	2 923	2 968	2.6	0.09	1.8	0.06	7.5	0.26
Democratic People's Republic of Korea	7 455	7 455	7 558	7 614	7 671	7 728	0.0	0.00	10.6	0.14	11.4	0.15
Democratic Republic of the Congo	160 540	153 790	147 040	142 018	140 604	139 189	−675.0	−0.43	−784.8	−0.53	−282.9	−0.20
Denmark	531	572	586	624	633	643	4.0	0.73	3.5	0.59	1.8	0.29
Djibouti	6	6	6	6	6	6	0.0	0.00	n.s.	0.06	n.s.	0.48
Dominica	59	59	58	58	58	57	n.s.	−0.05	−0.1	−0.09	n.s.	−0.08
Dominican Republic	2 132	2 166	2 186	2 215	2 224	2 257	3.4	0.16	3.3	0.15	4.3	0.19
Ecuador	14 632	13 731	13 028	12 819	12 461	12 310	−90.2	−0.63	−60.8	−0.46	−50.9	−0.40
Egypt	4	4	4	4	4	4	0.0	0.00	n.s.	0.28	n.s.	0.07
El Salvador	736	706	676	676	681	685	−3.0	−0.41	−2.0	−0.28	0.8	0.12
Equatorial Guinea	2 699	2 616	2 533	2 490	2 448	2 407	−8.4	−0.31	−8.4	−0.33	−8.4	−0.34
Eritrea	1 651	1 592	1 532	1 502	1 472	1 442	−6.0	−0.37	−6.0	−0.39	−6.0	−0.41
Estonia	2 206	2 239	2 336	2 421	2 444	2 447	3.3	0.15	12.2	0.52	2.5	0.10
Eswatini	486	471	456	448	441	433	−1.5	−0.31	−1.5	−0.33	−1.5	−0.34
Ethiopia	28 538	27 809	27 081	26 786	26 767	26 747	−72.8	−0.26	−68.2	−0.25	−3.9	−0.01

(Continued)

TABLE A1 *(Continued)*

Country/areas	Forest area (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Falkland Islands (Malvinas)*	0	0	0	0	0	0	0.0		0.0		0.0	
Faroe Islands	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Fiji	940	1 006	1 067	1 090	1 113	1 137	6.7	0.69	5.6	0.53	4.6	0.42
Finland	21 875	22 446	22 242	22 409	22 543	22 543	57.0	0.26	−2.4	−0.01	13.4	0.06
France	14 436	15 288	16 419	16 836	17 348	17 795	85.2	0.58	103.2	0.65	95.9	0.56
French Guiana	8 125	8 079	8 037	8 020	8 003	7 982	−4.6	−0.06	−4.0	−0.05	−3.8	−0.05
French Polynesia	144	149	149	149	149	149	0.4	0.28	0.1	0.04	0.0	0.00
Gabon	23 774	23 702	23 683	23 623	23 589	23 555	−7.3	−0.03	−5.3	−0.02	−6.7	−0.03
Gambia	415	358	300	271	242	209	−5.7	−1.46	−5.8	−1.83	−6.2	−2.55
Georgia	3 030	3 039	3 101	3 101	3 101	3 101	0.8	0.03	4.1	0.13	0.0	0.00
Germany	11 300	11 354	11 409	11 433	11 457	11 481	5.4	0.05	5.3	0.05	4.8	0.04
Ghana	5 806	6 163	6 521	6 699	6 878	7 056	35.7	0.60	35.7	0.56	35.7	0.52
Gibraltar	0	0	0	0	0	0	0.0		0.0		0.0	
Greece	3 709	3 709	3 721	4 098	4 763	4 763	0.0	0.00	25.9	0.67	66.5	1.51
Greenland	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Grenada	18	18	18	18	18	18	0.0	0.00	0.0	0.00	0.0	0.00
Guadeloupe	73	72	72	73	74	76	−0.1	−0.12	n.s.	0.06	0.3	0.36
Guam	24	24	24	28	28	28	0.0	0.00	0.3	1.10	0.0	0.00
Guatemala	4 852	4 227	3 756	3 671	3 602	3 536	−62.6	−1.37	−37.0	−0.93	−13.6	−0.38
Guernsey	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	n.s.	4.41	n.s.	1.13
Guinea	7 202	6 532	5 862	5 527	5 192	4 857	−67.0	−0.97	−67.0	−1.11	−67.0	−1.28
Guinea-Bissau	2 257	2 207	2 163	2 142	2 121	2 100	−5.0	−0.22	−4.3	−0.20	−4.2	−0.20
Guyana	18 602	18 564	18 520	18 461	18 415	18 377	−3.8	−0.02	−6.9	−0.04	−8.4	−0.05
Haiti	369	384	380	364	365	372	1.5	0.40	−1.3	−0.35	0.8	0.21
Holy See	0	0	0	0	0	0	0.0		0.0		0.0	
Honduras	7 644	7 129	6 745	6 527	6 112	5 861	−51.5	−0.69	−40.2	−0.59	−66.6	−1.07
Hungary	1 814	1 921	2 046	2 061	2 057	2 087	10.7	0.58	9.3	0.47	2.7	0.13
Iceland	18	32	49	53	57	61	1.4	6.04	1.4	3.40	0.8	1.45
India	63 938	67 591	69 496	70 828	72 309	72 739	365.3	0.56	215.8	0.31	191.1	0.27
Indonesia	116 335	91 959	96 305	95 028	95 562	95 969	−2 437.6	−2.32	204.6	0.22	94.1	0.10
Iran (Islamic Republic of)	10 751	10 751	10 751	10 751	10 751	10 751	0.0	0.00	0.0	0.00	0.0	0.00
Iraq	804	818	804	759	726	693	1.4	0.17	−3.9	−0.50	−6.6	−0.91
Ireland	462	630	720	755	793	833	16.9	3.16	8.3	1.21	7.8	0.99
Isle of Man	4	4	4	4	4	4	0.0	0.00	0.0	0.00	n.s.	0.11
Israel	132	153	154	165	140	150	2.1	1.49	0.8	0.50	−1.5	−0.95
Italy	7 590	8 369	9 028	8 907	9 360	9 422	78.0	0.98	35.9	0.42	51.5	0.56
Jamaica	521	521	558	577	597	616	n.s.	−0.01	3.8	0.69	3.9	0.65
Japan	24 950	24 876	24 966	24 944	24 919	24 908	−7.4	−0.03	4.5	0.02	−3.6	−0.01

(Continued)

TABLE A1 *(Continued)*

Country/areas	Forest area (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Jersey	1	1	1	1	1	1	0.0	0.00	0.0	0.00	n.s.	1.26
Jordan	71	71	71	71	71	71	0.0	0.00	0.0	0.00	0.0	0.00
Kazakhstan	3 162	3 157	3 082	3 308	3 451	3 521	−0.5	−0.02	10.1	0.31	21.2	0.62
Kenya	3 741	3 816	3 878	3 384	3 591	3 914	7.6	0.20	−28.8	−0.80	53.0	1.47
Kiribati	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Kuwait	3	5	5	6	6	6	0.2	3.76	0.1	1.34	n.s.	0.34
Kyrgyzstan	1 136	1 181	1 227	1 247	1 255	1 255	4.4	0.38	4.4	0.36	0.9	0.07
Lao People's Democratic Republic	14 399	14 050	13 661	13 369	13 213	13 036	−34.9	−0.25	−45.4	−0.33	−33.3	−0.25
Latvia	3 173	3 241	3 372	3 399	3 434	3 467	6.8	0.21	10.5	0.32	6.8	0.20
Lebanon	138	139	140	140	141	141	0.1	0.07	0.1	0.07	0.1	0.07
Lesotho	35	35	35	35	35	35	0.0	0.00	0.0	0.00	0.0	0.00
Liberia	8 009	8 009	7 620	7 037	6 529	6 327	0.0	0.00	−64.8	−0.86	−71.0	−1.06
Libya	217	214	210	209	207	205	−0.3	−0.15	−0.3	−0.16	−0.3	−0.16
Liechtenstein	5	5	6	6	6	6	n.s.	0.34	n.s.	0.21	n.s.	0.75
Lithuania	1 945	2 020	2 170	2 187	2 202	2 216	7.5	0.38	11.1	0.53	2.9	0.13
Luxembourg	86	87	89	89	89	89	0.1	0.10	0.1	0.15	0.0	0.00
Madagascar	13 677	13 014	11 946	11 146	10 543	9 922	−66.3	−0.50	−124.6	−1.03	−122.4	−1.16
Malawi	3 502	3 082	2 662	2 452	2 242	2 032	−42.0	−1.27	−42.0	−1.51	−42.0	−1.86
Malaysia	20 619	19 691	18 948	19 464	19 185	18 885	−92.7	−0.46	−15.1	−0.08	−57.9	−0.30
Maldives	4	4	4	4	4	4	0.0	0.00	0.0	0.00	0.0	0.00
Mali	13 998	12 993	11 987	11 485	10 982	10 479	−100.5	−0.74	−100.5	−0.82	−100.5	−0.91
Malta	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	n.s.	2.99
Marshall Islands	9	9	9	9	10	10	0.0	0.00	0.0	0.00	n.s.	0.32
Martinique	48	49	50	51	52	53	0.1	0.19	0.2	0.34	0.1	0.27
Mauritania	927	953	980	993	1 006	1 019	2.6	0.28	2.6	0.27	2.6	0.26
Mauritius	41	42	38	38	38	38	0.1	0.21	−0.2	−0.60	n.s.	n.s.
Mayotte	19	15	10	10	10	10	−0.4	−2.60	−0.3	−2.54	n.s.	−0.46
Mexico	71 804	69 594	68 156	67 543	66 904	66 266	−221.0	−0.31	−136.7	−0.20	−127.8	−0.19
Micronesia (Federated States of)	64	64	64	64	64	65	n.s.	0.04	n.s.	0.04	n.s.	0.05
Monaco	0	0	0	0	0	0	0.0		0.0		0.0	
Mongolia	14 352	14 264	14 184	14 178	14 178	14 178	−8.8	−0.06	−5.7	−0.04	0.0	0.00
Montenegro	626	626	827	827	827	827	0.0	0.00	13.4	1.87	0.0	0.00
Montserrat	4	2	2	2	2	2	−0.1	−3.62	0.0	0.00	0.0	0.00
Morocco	5 701	5 699	5 696	5 690	5 694	5 695	−0.2	n.s.	−0.6	−0.01	0.5	0.01
Mozambique	41 589	38 919	36 248	34 913	33 578	32 243	−267.0	−0.66	−267.0	−0.72	−267.0	−0.79
Myanmar	39 218	34 868	31 441	29 992	28 544	27 095	−435.0	−1.17	−325.0	−1.00	−289.7	−1.01
Namibia	8 769	8 059	8 053	8 049	8 046	8 043	−71.0	−0.84	−0.6	−0.01	−0.6	−0.01
Nauru	0	0	0	0	0	0	0.0		0.0		0.0	

(Continued)

TABLE A1 *(Continued)*

Country/areas	Forest area (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Nepal	5 748	5 916	6 083	6 100	6 183	6 266	16.7	0.29	12.3	0.21	16.6	0.27
Netherlands (Kingdom of the)	345	360	373	365	367	369	1.4	0.40	0.4	0.10	0.5	0.12
New Caledonia	831	838	839	893	893	893	0.7	0.08	3.7	0.42	0.0	0.00
New Zealand	9 372	9 850	9 848	9 847	9 965	10 303	47.8	0.50	−0.3	n.s.	45.6	0.45
Nicaragua	7 099	6 106	5 113	5 002	4 891	4 781	−99.3	−1.50	−73.6	−1.32	−22.1	−0.45
Niger	1 945	1 328	1 204	1 142	1 080	1 055	−61.7	−3.74	−12.4	−1.00	−8.7	−0.79
Nigeria	21 571	20 302	19 033	18 399	17 764	17 130	−126.9	−0.60	−126.9	−0.65	−126.9	−0.71
Niue	19	19	19	19	19	19	n.s.	−0.05	n.s.	n.s.	n.s.	0.03
Norfolk Island	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
North Macedonia	912	958	960	994	1 042	1 026	4.6	0.49	2.5	0.25	3.2	0.31
Northern Mariana Islands	20	20	20	24	24	24	0.0	0.00	0.3	1.22	0.0	0.00
Norway	12 217	12 198	12 149	12 133	12 121	12 109	−1.8	−0.02	−4.4	−0.04	−2.4	−0.02
Oman	2	2	2	2	2	2	0.0	0.00	0.0	0.00	0.0	0.00
Pakistan	3 461	3 317	3 165	3 036	3 089	3 192	−14.4	−0.42	−18.7	−0.59	15.6	0.50
Palau	38	40	41	41	41	42	0.1	0.37	0.1	0.23	0.1	0.21
Palestine	9	9	10	11	11	11	0.0	0.00	0.1	1.02	0.1	0.49
Panama	4 956	4 791	4 677	4 645	4 630	4 615	−16.5	−0.34	−9.7	−0.21	−3.0	−0.07
Papua New Guinea	34 614	34 395	34 176	34 153	34 048	34 029	−21.9	−0.06	−16.1	−0.05	−12.4	−0.04
Paraguay	25 680	21 910	18 140	16 370	15 116	14 297	−377.0	−1.58	−369.3	−1.92	−207.2	−1.34
Peru	77 038	74 045	71 051	69 554	68 656	67 160	−299.3	−0.40	−299.3	−0.42	−239.5	−0.35
Philippines	7 779	7 309	6 840	7 014	7 226	7 439	−47.0	−0.62	−19.7	−0.27	42.4	0.59
Pitcairn	4	4	4	4	4	4	0.0	0.00	0.0	0.00	0.0	0.00
Poland	8 882	9 059	9 329	9 420	9 464	9 495	17.7	0.20	24.1	0.26	7.5	0.08
Portugal	3 438	3 349	3 252	3 312	3 334	3 363	−9.0	−0.26	−2.4	−0.07	5.1	0.15
Puerto Rico	304	429	491	488	462	436	12.5	3.51	3.9	0.86	−5.2	−1.12
Qatar	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Republic of Korea	6 551	6 476	6 387	6 337	6 298	6 279	−7.5	−0.12	−9.3	−0.14	−5.8	−0.09
Republic of Moldova	325	344	375	386	373	370	1.9	0.57	2.8	0.77	−1.6	−0.42
Réunion	68	71	74	76	77	77	0.3	0.44	0.3	0.46	0.1	0.14
Romania	6 371	6 366	6 515	6 901	6 929	6 957	−0.5	−0.01	35.7	0.54	5.6	0.08
Russian Federation	811 641	812 445	821 502	823 206	828 432	832 630	80.4	0.01	717.4	0.09	942.4	0.11
Rwanda	437	409	416	489	562	635	−2.8	−0.65	5.3	1.19	14.6	2.64
Saint Barthélemy	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Saint Kitts and Nevis	11	11	11	11	11	11	0.0	0.00	0.0	0.00	0.0	0.00
Saint Lucia	27	29	31	32	33	33	0.2	0.72	0.2	0.66	0.1	0.24
Saint Martin (French part)	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Saint Pierre and Miquelon	2	2	1	1	1	1	n.s.	−1.28	n.s.	−1.51	n.s.	−1.88

(Continued)

TABLE A1 *(Continued)*

Country/areas	Forest area (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Saint Vincent and the Grenadines	29	29	29	29	29	29	n.s.	0.01	n.s.	n.s.	n.s.	n.s.
Samoa	177	172	167	165	162	160	−0.5	−0.28	−0.5	−0.29	−0.5	−0.30
San Marino	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Sao Tome and Principe	59	59	58	55	55	55	−0.1	−0.09	−0.2	−0.41	n.s.	0.05
Saudi Arabia	2 768	2 768	2 768	2 768	2 768	2 776	0.0	0.00	0.0	0.00	0.8	0.03
Senegal	9 193	9 038	8 882	8 805	8 727	8 649	−15.5	−0.17	−15.5	−0.17	−15.5	−0.18
Serbia	2 313	2 483	2 880	3 078	3 277	3 475	17.0	0.71	39.7	1.44	39.7	1.22
Seychelles	34	32	30	29	28	27	−0.2	−0.65	−0.2	−0.71	−0.2	−0.79
Sierra Leone	3 127	2 929	2 732	2 634	2 535	2 436	−19.7	−0.65	−19.7	−0.71	−19.7	−0.78
Singapore	15	17	18	16	16	16	0.2	1.38	n.s.	−0.21	−0.1	−0.41
Sint Maarten (Dutch part)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Slovakia	1 902	1 901	1 918	1 922	1 931	1 940	−0.1	−0.01	1.4	0.07	1.9	0.10
Slovenia	1 188	1 233	1 247	1 248	1 244	1 244	4.5	0.37	1.0	0.08	−0.4	−0.04
Solomon Islands	2 540	2 532	2 525	2 521	2 518	2 514	−0.7	−0.03	−0.7	−0.03	−0.7	−0.03
Somalia	8 284	7 516	6 749	5 979	5 210	4 830	−76.8	−0.97	−102.5	−1.51	−114.9	−2.11
South Africa	19 817	20 692	21 568	22 006	22 444	22 881	87.6	0.43	87.6	0.41	87.6	0.39
South Sudan	7 104	7 114	7 136	7 157	7 153	7 160	1.0	0.01	2.9	0.04	0.3	n.s.
Spain	13 905	17 094	18 566	18 575	18 982	19 133	318.9	2.09	98.8	0.56	55.7	0.30
Sri Lanka	2 370	2 231	2 156	2 098	2 145	2 121	−13.9	−0.60	−8.9	−0.41	2.2	0.11
Sudan	28 075	26 334	24 593	23 722	22 851	21 980	−174.1	−0.64	−174.1	−0.69	−174.1	−0.76
Suriname	14 866	14 902	14 862	14 839	14 765	14 674	3.6	0.02	−4.2	−0.03	−16.4	−0.11
Svalbard and Jan Mayen Islands	0	0	0	0	0	0	0.0		0.0		0.0	
Sweden	28 063	28 163	28 073	27 980	27 934	27 934	10.0	0.04	−12.2	−0.04	−4.6	−0.02
Switzerland	1 154	1 196	1 235	1 249	1 258	1 267	4.3	0.36	3.5	0.29	1.8	0.15
Syrian Arab Republic	451	461	512	527	528	528	1.0	0.21	4.4	0.90	0.1	0.01
Tajikistan	408	410	410	422	423	425	0.2	0.05	0.8	0.19	0.3	0.06
Thailand	20 235	20 165	20 095	20 060	20 338	19 647	−7.0	−0.03	−7.0	−0.03	−41.3	−0.21
Timor-Leste	1 101	1 087	1 073	1 066	1 059	1 054	−1.4	−0.13	−1.4	−0.13	−1.1	−0.11
Togo	1 298	1 268	1 239	1 224	1 209	1 224	−3.0	−0.23	−3.0	−0.24	n.s.	n.s.
Tokelau	0	0	0	0	0	0	0.0		0.0		0.0	
Tonga	9	9	9	9	9	9	0.0	0.00	0.0	0.00	0.0	0.00
Trinidad and Tobago	241	237	232	230	228	226	−0.4	−0.18	−0.4	−0.18	−0.4	−0.19
Tunisia	644	668	703	705	699	687	2.4	0.36	2.5	0.36	−1.7	−0.25
Türkiye	19 783	20 148	21 083	21 630	22 220	22 806	36.5	0.18	98.8	0.47	117.5	0.53
Turkmenistan	2 330	2 330	2 330	2 330	2 330	2 330	0.0	0.00	0.0	0.00	0.0	0.00
Turks and Caicos Islands	11	11	11	11	11	11	0.0	0.00	0.0	0.00	0.0	0.00
Tuvalu	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00

(Continued)

TABLE A1 *(Continued)*

Country/areas	Forest area (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Uganda	4 548	3 401	2 899	2 649	2 508	2 368	−114.7	−2.86	−50.1	−1.65	−28.1	−1.12
Ukraine	9 274	9 510	9 548	9 700	9 900	10 090	23.6	0.25	12.7	0.13	39.0	0.39
United Arab Emirates	315	315	320	321	323	325	n.s.	0.01	0.4	0.13	0.3	0.10
United Kingdom of Great Britain and Northern Ireland	2 778	2 954	3 059	3 155	3 215	3 278	17.6	0.62	13.4	0.44	12.3	0.38
United Republic of Tanzania	58 165	54 135	50 105	48 090	45 745	43 400	−403.0	−0.72	−403.0	−0.79	−469.0	−1.02
United States of America	302 450	303 536	308 720	310 095	309 255	308 895	108.6	0.04	437.3	0.14	−120.0	−0.04
United States Virgin Islands	20	19	18	19	20	21	−0.1	−0.56	n.s.	−0.05	0.2	0.76
Uruguay	879	1 336	1 696	1 834	1 932	2 024	45.7	4.27	33.2	2.13	19.0	0.99
Uzbekistan	2 549	2 961	3 350	3 549	3 689	3 894	41.2	1.51	39.2	1.21	34.5	0.93
Vanuatu	991	967	943	931	919	907	−2.4	−0.24	−2.4	−0.25	−2.4	−0.26
Venezuela (Bolivarian Republic of)	50 484	49 232	48 382	47 879	47 335	47 088	−125.2	−0.25	−90.2	−0.19	−79.1	−0.17
Viet Nam	9 376	11 784	13 388	14 062	14 677	14 790	240.8	2.31	151.9	1.19	72.8	0.51
Wallis and Futuna Islands	10	9	9	10	10	11	n.s.	−0.52	0.1	0.55	0.1	0.87
Western Sahara	605	540	537	540	533	529	−6.6	−1.15	n.s.	n.s.	−1.0	−0.19
Yemen	549	549	549	549	549	549	0.0	0.00	0.0	0.00	0.0	0.00
Zambia	47 412	47 054	46 696	45 755	45 360	44 874	−35.8	−0.08	−86.6	−0.19	−88.1	−0.19
Zimbabwe	16 715	15 658	14 601	14 303	14 031	13 766	−105.7	−0.65	−90.4	−0.60	−53.7	−0.38

Note: The rate of change (%) is calculated as the compound annual change rate. * A dispute exists between the Government of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas). n.s. corresponds to a non-significant value – that is, a value that is greater than zero but which would have been displayed as zero if rounded to the number of decimals in the column.

TABLE A2. Extent of naturally regenerating forest, 1990–2025

Country/areas	Naturally regenerating forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Afghanistan	1 209	1 209	1 209	1 209	1 209	1 209	0.0	0.00	0.0	0.00	0.0	0.00
Albania												
Algeria	1 464	1 451	1 438	1 432	1 425	1 419	−1.3	−0.09	−1.3	−0.09	−1.3	−0.09
American Samoa	18	18	16	16	16	16	n.s.	−0.19	−0.1	−0.74	0.0	0.00
Andorra	18	17	18	18	18	18	n.s.	−0.23	0.1	0.38	n.s.	−0.04
Angola	77 418	75 919	70 844	68 302	65 755	63 207	−149.9	−0.20	−507.8	−0.70	−509.6	−0.77
Anguilla												
Antigua and Barbuda	10	9	9	8	8	8	−0.1	−0.67	−0.1	−0.74	−0.1	−0.81
Argentina	55 221	52 362	48 534	47 154	46 195	45 218	−285.8	−0.53	−347.2	−0.70	−193.6	−0.42
Armenia	134	133	133	133	133	134	−0.1	−0.06	n.s.	0.01	0.1	0.04
Aruba	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Ascension, Saint Helena and Tristan da Cunha	2	2	2	2	2	2	0.0	0.00	0.0	0.00	0.0	0.00
Australia	133 552	131 423	128 856	130 224	131 204	131 504	−212.9	−0.16	−79.9	−0.06	128.0	0.10
Austria	2 298	2 399	2 491	2 524	2 557	2 591	10.1	0.43	8.4	0.34	6.7	0.26
Azerbaijan	652	681	743	755	858	906	2.9	0.44	4.9	0.68	15.1	1.84
Bahamas	510	510	510	510	510	510	0.0	0.00	0.0	0.00	0.0	0.00
Bahrain	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Bangladesh	1 896	1 845	1 816	1 725	1 634	1 543	−5.0	−0.27	−8.0	−0.45	−18.2	−1.11
Barbados	6	6	6	6	6	6	0.0	0.00	0.0	0.00	0.0	0.00
Belarus	6 576	6 413	6 484	6 422	6 611	6 710	−16.3	−0.25	0.6	0.01	28.8	0.44
Belgium	231	259	283	251	243	243	2.8	1.15	−0.5	−0.21	−0.8	−0.32
Belize	1 579	1 503	1 427	1 389	1 351	1 314	−7.6	−0.49	−7.6	−0.52	−7.5	−0.56
Benin	6 893	5 621	4 225	3 465	3 278	3 091	−127.3	−2.02	−143.7	−3.17	−37.4	−1.14
Bermuda												
Bhutan	2 487	2 586	2 686	2 695	2 697	2 654	9.9	0.39	7.2	0.27	−4.1	−0.15
Bolivia (Plurinational State of)	61 754	59 051	57 450	56 630	55 474	54 254	−270.3	−0.45	−161.4	−0.28	−237.6	−0.43
Bonaire, Sint Eustatius and Saba	4	4	4	4	4	4	0.0	0.00	0.0	0.00	0.0	0.00
Bosnia and Herzegovina				2 041	2 044	2 049					0.8	0.04
Botswana	15 728	15 728	15 728	15 728	15 730	15 730	0.0	0.00	0.0	0.00	0.2	n.s.
Brazil	614 885	557 068	517 759	505 571	492 741	476 873	−5 781.7	−0.98	−3 433.1	−0.64	−2 869.8	−0.58
British Virgin Islands	10	10	10	10	10	10	0.0	0.00	n.s.	−0.02	0.0	0.00

(Continued)

TABLE A2 *(Continued)*

Country/areas	Naturally regenerating forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Brunei Darussalam	412	396	376	375	374	374	−1.6	−0.40	−1.4	−0.36	−0.1	−0.02
Bulgaria	2 295	2 442	2 920	3 009	3 117	3 225	14.7	0.62	37.8	1.40	21.6	0.70
Burkina Faso	8 288	6 366	5 026	4 429	3 831	3 234	−192.2	−2.60	−129.2	−2.39	−119.5	−3.10
Burundi	115	81	81	167	167	167	−3.4	−3.46	5.7	4.93	0.0	0.00
Cabo Verde	14	14	14	14	14	14	0.0	0.00	0.0	0.00	0.0	0.00
Cambodia	10 938	10 681	10 435	8 303	7 316	5 737	−25.6	−0.24	−158.6	−1.67	−256.6	−3.63
Cameroon	22 482	21 576	20 859	20 569	19 607	19 022	−90.6	−0.41	−67.1	−0.32	−154.7	−0.78
Canada	356 156	350 909	351 290	351 729	350 426	348 111	−524.7	−0.15	54.6	0.02	−361.8	−0.10
Cayman Islands	13	13	13	13	13	13	n.s.	−0.15	n.s.	−0.11	0.0	0.00
Central African Republic	46 433	46 083	45 733	45 558	45 324	45 091	−35.0	−0.08	−35.0	−0.08	−46.7	−0.10
Chad	6 719	6 340	5 513	4 872	4 231	3 590	−37.9	−0.58	−97.8	−1.74	−128.2	−3.01
Chile	15 283	15 195	15 106	15 069	15 020	15 008	−8.9	−0.06	−8.4	−0.06	−6.1	−0.04
China	112 989	122 170	127 286	131 284	131 050	134 550	918.2	0.78	607.6	0.48	326.6	0.25
Colombia	65 006	62 405	61 018	60 502	59 583	58 916	−260.1	−0.41	−126.8	−0.21	−158.6	−0.27
Comoros	45	40	36	34	32	32	−0.4	−1.02	−0.4	−1.18	−0.2	−0.67
Congo	22 196	22 076	21 956	21 854	21 725	21 720	−12.0	−0.05	−14.8	−0.07	−13.5	−0.06
Cook Islands	14	14	14	14	14	14	0.0	0.00	0.0	0.00	0.0	0.00
Costa Rica	2 742	2 744	2 781	2 891	2 912	2 945	0.1	0.01	9.8	0.35	5.4	0.19
Côte d'Ivoire	8 212	6 009	4 612	3 913	3 333	2 871	−220.3	−3.07	−139.8	−2.82	−104.2	−3.05
Croatia	1 758	1 803	1 845	1 847	1 865	1 872	4.6	0.26	2.9	0.16	2.5	0.13
Cuba	1 922	2 320	2 666	2 847	2 961	2 963	39.8	1.90	35.1	1.37	11.6	0.40
Curaçao	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Cyprus	137	144	142	142	140	139	0.7	0.52	−0.2	−0.12	−0.3	−0.19
Czechia	375	379	380	382	459	467	0.3	0.09	0.2	0.06	8.4	2.02
Democratic People's Republic of Korea	6 325	6 192	6 161	6 151	6 141	6 131	−13.3	−0.21	−2.7	−0.04	−2.0	−0.03
Democratic Republic of the Congo	160 433	153 694	146 947	141 916	140 484	139 058	−673.9	−0.43	−785.2	−0.53	−285.8	−0.20
Denmark			147	174	205	212					3.8	2.01
Djibouti	6	6	6	6	6	6	0.0	0.00	0.0	0.00	0.0	0.00
Dominica	59	59	58	58	58	57	n.s.	−0.05	−0.1	−0.09	n.s.	−0.08
Dominican Republic	2 111	2 123	2 076	2 065	2 015	2 031	1.2	0.05	−3.9	−0.18	−3.4	−0.17
Ecuador	14 588	13 660	12 944	12 692	12 340	12 190	−92.7	−0.65	−64.5	−0.49	−50.2	−0.40
Egypt	1	1	1	1	1	1	0.0	0.00	n.s.	1.87	0.0	0.00
El Salvador	730	699	668	668	672	676	−3.1	−0.43	−2.1	−0.30	0.8	0.12
Equatorial Guinea	2 699	2 616	2 532	2 490	2 448	2 407	−8.4	−0.31	−8.4	−0.33	−8.4	−0.34
Eritrea	1 641	1 582	1 522	1 492	1 462	1 432	−6.0	−0.37	−6.0	−0.39	−6.0	−0.41
Estonia	2 011	2 041	2 129	2 213	2 213	2 193	3.0	0.15	11.5	0.54	−2.0	−0.09
Eswatini	340	325	310	303	295	288	−1.5	−0.45	−1.5	−0.48	−1.5	−0.51
Ethiopia	28 298	27 380	26 463	26 092	25 901	25 779	−91.7	−0.33	−85.9	−0.32	−31.3	−0.12

(Continued)

TABLE A2 *(Continued)*

Country/areas	Naturally regenerating forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Falkland Islands (Malvinas)*	0	0	0	0	0	0	0.0		0.0		0.0	
Faroe Islands	0	0	0	0	0	0	0.0		0.0		0.0	
Fiji	855	881	901	904	907	909	2.6	0.30	1.5	0.17	0.5	0.06
Finland	17 485	17 301	15 334	15 041	14 707	14 707	−18.4	−0.11	−150.7	−0.93	−33.4	−0.22
France	12 908	13 702	14 346	14 604	15 054	15 439	79.4	0.60	60.1	0.43	83.5	0.56
French Guiana	8 124	8 079	8 036	8 019	8 002	7 981	−4.6	−0.06	−4.0	−0.05	−3.8	−0.05
French Polynesia	140	140	140	140	140	140	0.0	0.00	0.0	0.00	0.0	0.00
Gabon	23 736	23 657	23 626	23 565	23 541	23 507	−8.0	−0.03	−6.1	−0.03	−5.8	−0.02
Gambia	413	356	298	269	240	208	−5.7	−1.47	−5.8	−1.85	−6.2	−2.56
Georgia	2 984	2 992	3 054	3 054	3 054	3 054	0.8	0.03	4.1	0.14	n.s.	n.s.
Germany	5 650	5 677	5 705	5 717	5 729	5 741	2.7	0.05	2.6	0.05	2.4	0.04
Ghana	5 756	6 097	6 366	6 505	6 605	6 756	34.1	0.58	27.2	0.43	25.0	0.38
Gibraltar	0	0	0	0	0	0	0.0		0.0		0.0	
Greece	3 576	3 576	3 588	3 952	4 593	4 593	0.0	0.00	25.0	0.67	64.1	1.51
Greenland	0	0	0	0	0	0	0.0		0.0		0.0	
Grenada	17	17	17	17	17	17	0.0	0.00	0.0	0.00	0.0	0.00
Guadeloupe	73	72	71	72	74	75	−0.1	−0.12	n.s.	0.06	0.3	0.37
Guam	24	24	24	28	28	28	0.0	0.00	0.3	1.10	0.0	0.00
Guatemala	4 828	4 190	3 644	3 539	3 422	3 227	−63.9	−1.41	−43.3	−1.12	−31.2	−0.92
Guernsey	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	n.s.	2.91	0.0	0.00
Guinea	7 158	6 467	5 776	5 430	5 086	4 746	−69.1	−1.01	−69.1	−1.16	−68.4	−1.34
Guinea-Bissau	2 257	2 207	2 163	2 142	2 121	2 100	−5.0	−0.22	−4.3	−0.20	−4.2	−0.20
Guyana	18 602	18 564	18 520	18 461	18 415	18 377	−3.8	−0.02	−6.9	−0.04	−8.4	−0.05
Haiti	369	384	380	364	365	372	1.5	0.40	−1.3	−0.35	0.8	0.21
Holy See	0	0	0	0	0	0	0.0		0.0		0.0	
Honduras	7 644	7 129	6 743	6 512	6 087	5 826	−51.5	−0.69	−41.2	−0.60	−68.6	−1.11
Hungary			1 253	1 268	1 276	1 296					2.8	0.22
Iceland	11	11	11	12	12	12	n.s.	0.40	n.s.	0.38	n.s.	0.37
India	53 275	56 302	57 785	58 883	59 044	59 267	302.8	0.55	172.1	0.30	38.4	0.07
Indonesia	113 166	88 636	91 846	90 360	90 112	90 485	−2 453.0	−2.41	114.9	0.13	12.5	0.01
Iran (Islamic Republic of)	9 192	9 192	9 192	9 192	9 192	9 192	0.0	0.00	0.0	0.00	0.0	0.00
Iraq	789	801	789	743	711	675	1.2	0.15	−3.9	−0.50	−6.8	−0.95
Ireland	81	81	81	97	112	117	n.s.	0.01	1.0	1.16	2.0	1.93
Isle of Man	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Israel	66	65	66	76	55	50	−0.1	−0.15	0.7	1.05	−2.6	−4.10
Italy	7 061	7 774	8 394	8 294	8 728	8 799	71.3	0.97	34.7	0.43	50.5	0.59
Jamaica	512	513	550	569	589	608	n.s.	0.01	3.8	0.70	3.9	0.66
Japan	14 663	14 545	14 674	14 726	14 799	14 831	−11.8	−0.08	12.1	0.08	10.5	0.07

(Continued)

TABLE A2 *(Continued)*

Country/areas	Naturally regenerating forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Jersey												
Jordan	41	41	41	41	41	41	0.0	0.00	0.0	0.00	n.s.	n.s.
Kazakhstan	2 645	2 628	2 638	2 888	3 029	3 090	−1.7	−0.06	17.3	0.63	20.2	0.68
Kenya	3 588	3 664	3 726	3 231	3 439	3 761	7.6	0.21	−28.8	−0.83	53.0	1.53
Kiribati												
Kuwait	0	0	0	0	0	0	0.0		0.0		0.0	
Kyrgyzstan	977	1 016	1 042	1 050	1 170	1 170	3.8	0.38	2.3	0.22	11.9	1.08
Lao People's Democratic Republic	14 393	14 032	13 551	13 231	12 972	12 658	−36.1	−0.25	−53.4	−0.39	−57.3	−0.44
Latvia	2 859	2 919	3 044	2 979	2 892	2 903	6.0	0.21	4.0	0.14	−7.5	−0.26
Lebanon	138	139	140	140	140	141	0.1	0.07	0.1	0.07	0.1	0.07
Lesotho	26	26	26	26	26	26	0.0	0.00	0.0	0.00	0.0	0.00
Liberia	7 809	7 809	7 420	6 837	6 329	6 127	0.0	0.00	−64.8	−0.88	−71.0	−1.09
Libya	141	139	137	136	135	133	−0.2	−0.15	−0.2	−0.16	−0.2	−0.16
Liechtenstein	5	5	6	6	6	6	n.s.	0.34	n.s.	0.21	n.s.	0.75
Lithuania	1 534	1 554	1 634	1 602	1 616	1 627	2.0	0.13	3.2	0.20	2.5	0.15
Luxembourg	58	59	59	59	59	59	0.1	0.17	0.0	0.00	0.0	0.00
Madagascar	13 351	12 704	11 662	10 880	10 292	9 686	−64.7	−0.50	−121.6	−1.03	−119.4	−1.16
Malawi	3 363	2 964	2 565	2 366	2 166	1 973	−39.9	−1.25	−39.9	−1.49	−39.3	−1.80
Malaysia	18 684	18 064	17 639	17 756	17 116	16 526	−62.0	−0.34	−20.5	−0.11	−123.0	−0.72
Maldives	4	4	4	4	4	4	0.0	0.00	0.0	0.00	0.0	0.00
Mali	13 994	12 982	11 754	11 072	10 491	9 952	−101.2	−0.75	−127.3	−1.06	−112.0	−1.06
Malta	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Marshall Islands	6	6	6	6	7	7	0.0	0.00	0.0	0.00	n.s.	0.56
Martinique	45	46	48	49	50	50	0.1	0.16	0.2	0.34	0.1	0.28
Mauritania	830	768	707	677	646	615	−6.1	−0.76	−6.1	−0.84	−6.1	−0.94
Mauritius	24	24	20	20	20	20	0.0	0.00	−0.2	−1.06	0.0	0.00
Mayotte	19	14	10	10	9	9	−0.5	−2.71	−0.3	−2.74	−0.1	−0.75
Mexico	71 747	69 537	68 072	67 442	66 787	66 131	−221.1	−0.31	−139.6	−0.20	−131.1	−0.20
Micronesia (Federated States of)	43	47	50	50	50	50	0.3	0.74	0.2	0.47	n.s.	0.06
Monaco	0	0	0	0	0	0	0.0		0.0		0.0	
Mongolia	14 351	14 262	14 182	14 177	14 170	14 170	−8.8	−0.06	−5.7	−0.04	−0.6	n.s.
Montenegro	618	618	819	819	819	819	0.0	0.00	13.4	1.90	0.0	0.00
Montserrat	4	2	2	2	2	2	−0.1	−3.62	0.0	0.00	0.0	0.00
Morocco	5 223	5 159	5 150	5 141	5 119	5 109	−6.3	−0.12	−1.2	−0.02	−3.2	−0.06
Mozambique	41 551	38 881	36 194	34 847	33 504	32 159	−267.0	−0.66	−268.9	−0.73	−268.9	−0.80
Myanmar	38 824	34 172	30 453	28 849	27 245	25 641	−465.2	−1.27	−354.9	−1.12	−320.8	−1.17
Namibia	8 769	8 059	8 053	8 049	8 046	8 043	−71.0	−0.84	−0.6	−0.01	−0.6	−0.01
Nauru	0	0	0	0	0	0	0.0		0.0		0.0	

(Continued)

TABLE A2 *(Continued)*

Country/areas	Naturally regenerating forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Nepal	5 378	5 545	5 712	5 730	5 813	5 896	16.7	0.31	12.3	0.22	16.6	0.29
Netherlands (Kingdom of the)	50	46	41	40	42	43	−0.4	−0.83	−0.4	−0.93	0.3	0.63
New Caledonia	822	828	828	887	887	887	0.6	0.07	4.0	0.46	0.0	0.00
New Zealand	7 841	7 825	7 824	7 822	7 842	7 869	−1.6	−0.02	−0.3	n.s.	4.7	0.06
Nicaragua	7 099	6 106	5 086	4 937	4 793	4 649	−99.3	−1.50	−77.9	−1.41	−28.9	−0.60
Niger	1 897	1 255	1 106	1 032	957	858	−64.2	−4.05	−14.9	−1.30	−17.4	−1.83
Nigeria	19 959	18 391	16 823	16 040	15 256	14 472	−156.8	−0.81	−156.8	−0.91	−156.8	−1.02
Niue	19	19	19	19	19	19	n.s.	−0.05	n.s.	n.s.	n.s.	0.03
Norfolk Island	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
North Macedonia												
Northern Mariana Islands	20	20	20	24	24	24	0.0	0.00	0.3	1.22	0.0	0.00
Norway			12 034	12 020	12 008	11 996					−2.4	−0.02
Oman	2	2	2	2	2	2	0.0	0.00	0.0	0.00	0.0	0.00
Pakistan	3 358	3 211	3 056	2 926	2 971	3 066	−14.7	−0.45	−19.0	−0.62	14.0	0.47
Palau	19	20	20	20	21	21	0.1	0.37	n.s.	0.23	n.s.	0.22
Palestine	8	8	9	9	10	10	0.0	0.00	0.1	1.02	n.s.	0.49
Panama	4 945	4 758	4 621	4 583	4 564	4 540	−18.7	−0.38	−11.6	−0.25	−4.4	−0.10
Papua New Guinea	34 565	34 346	34 127	34 104	33 994	33 970	−21.9	−0.06	−16.1	−0.05	−13.4	−0.04
Paraguay	25 680	21 910	18 140	16 370	15 064	13 976	−377.0	−1.58	−369.3	−1.92	−239.4	−1.57
Peru	76 972	73 971	70 958	69 426	68 497	66 969	−300.1	−0.40	−303.0	−0.42	−245.7	−0.36
Philippines	7 488	6 989	6 489	6 649	6 688	6 727	−50.0	−0.69	−22.7	−0.33	7.8	0.12
Pitcairn												
Poland				2 072	2 082	2 089					1.7	0.08
Portugal	1 224	1 020	841	852	863	875	−20.4	−1.80	−11.2	−1.19	2.2	0.26
Puerto Rico	304	429	491	488	462	436	12.5	3.51	3.9	0.86	−5.2	−1.12
Qatar	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Republic of Korea	4 642	4 404	4 152	4 056	4 031	4 019	−23.8	−0.52	−23.2	−0.55	−3.7	−0.09
Republic of Moldova	179	189	163	168	162	161	1.0	0.57	−1.4	−0.81	−0.7	−0.43
Réunion	63	66	69	71	72	72	0.3	0.47	0.3	0.50	0.1	0.15
Romania	5 843	5 838	5 975	5 944	6 034	6 281	−0.5	−0.01	7.1	0.12	33.6	0.55
Russian Federation	794 623	794 140	801 259	802 758	807 809	811 833	−48.3	−0.01	574.5	0.07	907.5	0.11
Rwanda	204	161	139	172	205	237	−4.3	−2.36	0.7	0.44	6.5	3.28
Saint Barthélemy	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Saint Kitts and Nevis	11	11	11	11	11	11	0.0	0.00	0.0	0.00	0.0	0.00
Saint Lucia	27	29	31	32	33	33	0.2	0.72	0.2	0.66	0.1	0.24
Saint Martin (French part)	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Saint Pierre and Miquelon	2	2	1	1	1	1	n.s.	−1.28	n.s.	−1.51	n.s.	−1.97

(Continued)

TABLE A2 *(Continued)*

Country/areas	Naturally regenerating forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Saint Vincent and the Grenadines	28	29	29	29	29	29	0.1	0.39	n.s.	0.01	n.s.	0.02
Samoa	126	122	119	117	115	114	−0.3	−0.28	−0.3	−0.29	−0.4	−0.30
San Marino	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00
Sao Tome and Principe	59	59	58	55	55	55	−0.1	−0.09	−0.2	−0.41	n.s.	0.05
Saudi Arabia	2 700	2 700	2 700	2 700	2 700	2 700	0.0	0.00	0.0	0.00	0.0	0.00
Senegal	9 183	9 028	8 873	8 778	8 688	8 593	−15.5	−0.17	−16.7	−0.19	−18.5	−0.21
Serbia	2 274	2 320	2 693	2 879	3 065	3 251	4.6	0.20	37.2	1.45	37.2	1.22
Seychelles	29	27	25	24	23	22	−0.2	−0.77	−0.2	−0.85	−0.2	−0.95
Sierra Leone	3 120	2 922	2 718	2 616	2 514	2 412	−19.8	−0.66	−20.4	−0.73	−20.4	−0.81
Singapore	15	17	18	16	16	16	0.2	1.38	n.s.	−0.21	−0.1	−0.41
Sint Maarten (Dutch part)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.0	0.00	0.0	0.00	0.0	0.00
Slovakia	1 164	1 146	1 177	1 175	1 159	1 164	−1.7	−0.15	1.9	0.16	−1.1	−0.09
Slovenia	1 123	1 168	1 182	1 182	1 179	1 174	4.5	0.39	0.9	0.08	−0.8	−0.07
Solomon Islands	2 515	2 507	2 500	2 496	2 492	2 489	−0.7	−0.03	−0.7	−0.03	−0.7	−0.03
Somalia	8 280	7 512	6 745	5 975	5 206	4 826	−76.8	−0.97	−102.5	−1.51	−114.9	−2.11
South Africa	17 901	18 632	19 362	19 728	20 093	20 458	73.1	0.40	73.1	0.38	73.1	0.36
South Sudan	6 389	6 399	6 421	6 441	6 437	6 445	1.0	0.02	2.9	0.04	0.4	0.01
Spain	11 959	14 703	15 970	15 956	16 180	16 314	274.3	2.09	83.5	0.55	35.8	0.22
Sri Lanka	2 099	1 994	1 951	1 913	1 909	1 884	−10.4	−0.51	−5.4	−0.28	−2.9	−0.15
Sudan	27 945	26 204	24 462	23 592	22 721	21 850	−174.1	−0.64	−174.1	−0.70	−174.1	−0.76
Suriname	14 852	14 888	14 848	14 824	14 751	14 660	3.6	0.02	−4.2	−0.03	−16.4	−0.11
Svalbard and Jan Mayen Islands	0	0	0	0	0	0	0.0		0.0		0.0	
Sweden	21 245	20 626	20 138	19 792	19 506	19 235	−61.9	−0.30	−55.6	−0.27	−55.7	−0.29
Switzerland	972	1 025	1 075	1 092	1 099	1 107	5.3	0.54	4.4	0.42	1.6	0.14
Syrian Arab Republic	233	233	233	233	233	233	0.0	0.00	0.0	0.00	0.0	0.00
Tajikistan	295	297	297	305	306	307	0.1	0.05	0.6	0.19	0.2	0.06
Thailand	16 533	16 463	16 393	16 358	16 377	16 333	−7.0	−0.04	−7.0	−0.04	−2.5	−0.01
Timor-Leste	1 089	1 075	1 061	1 054	1 047	1 043	−1.4	−0.13	−1.4	−0.13	−1.1	−0.11
Togo	1 277	1 234	1 192	1 170	1 149	1 129	−4.3	−0.34	−4.3	−0.36	−4.1	−0.36
Tokelau	0	0	0	0	0	0	0.0		0.0		0.0	
Tonga	8	8	8	8	8	8	0.0	0.00	0.0	0.00	0.0	0.00
Trinidad and Tobago	197	193	188	186	184	182	−0.4	−0.22	−0.4	−0.22	−0.4	−0.23
Tunisia	570	561	551	546	542	537	−1.0	−0.17	−1.0	−0.17	−1.0	−0.18
Türkiye	19 238	19 593	20 461	20 932	21 503	22 051	35.5	0.18	89.3	0.44	111.9	0.52
Turkmenistan	2 180	2 180	2 180	2 180	2 180	2 180	0.0	0.00	0.0	0.00	0.0	0.00
Turks and Caicos Islands	11	11	11	11	11	11	0.0	0.00	0.0	0.00	0.0	0.00
Tuvalu	1	1	1	1	1	1	0.0	0.00	0.0	0.00	0.0	0.00

(Continued)

TABLE A2 *(Continued)*

Country/areas	Naturally regenerating forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Uganda	4 378	3 132	2 533	2 233	2 043	1 853	−124.6	−3.29	−60.0	−2.23	−37.9	−1.84
Ukraine	4 707	4 815	4 731	4 828	5 052	5 242	10.8	0.23	0.9	0.02	41.4	0.83
United Arab Emirates	311	311	311	311	311	311	0.0	0.00	0.0	0.00	0.0	0.00
United Kingdom of Great Britain and Northern Ireland	344	344	344	344	344	344	0.0	0.00	0.0	0.00	0.0	0.00
United Republic of Tanzania	57 612	53 582	49 552	47 537	45 192	42 847	−403.0	−0.72	−403.0	−0.79	−469.0	−1.03
United States of America	284 512	280 976	283 156	283 731	281 793	281 472	−353.6	−0.12	183.7	0.07	−225.9	−0.08
United States Virgin Islands	20	19	18	19	20	21	−0.1	−0.56	n.s.	−0.05	0.2	0.76
Uruguay	701	737	826	839	845	857	3.7	0.51	6.8	0.86	1.8	0.21
Uzbekistan	1 356	1 416	1 356	1 393	1 423	1 510	6.0	0.43	−1.5	−0.11	11.7	0.81
Vanuatu	971	948	924	913	901	889	−2.3	−0.24	−2.3	−0.25	−2.3	−0.26
Venezuela (Bolivarian Republic of)	50 114	48 504	47 452	46 866	46 279	45 978	−161.0	−0.33	−109.2	−0.23	−88.7	−0.19
Viet Nam	8 631	10 181	10 769	10 869	10 986	10 859	155.0	1.66	45.9	0.44	−1.0	−0.01
Wallis and Futuna Islands	9	9	9	10	10	10	−0.1	−0.73	0.1	0.58	0.1	0.97
Western Sahara	605	540	537	540	533	529	−6.6	−1.15	n.s.	n.s.	−1.0	−0.19
Yemen	384	384	384	384	384	384	0.0	0.00	0.0	0.00	0.0	0.00
Zambia	47 355	46 998	46 640	45 701	45 306	44 820	−35.8	−0.08	−86.4	−0.19	−88.0	−0.19
Zimbabwe	16 326	15 293	14 261	13 969	13 704	13 445	−103.3	−0.65	−88.3	−0.60	−52.4	−0.38

Note: The rate of change (%) is calculated as the compound annual change rate. * A dispute exists between the Government of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas). n.s. corresponds to a non-significant value – that is, a value that is greater than zero but which would have been displayed as zero if rounded to the number of decimals in the column.

TABLE A3. Extent of planted forest, 1990–2025

Country/areas	Planted forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Afghanistan	0	0	0	0	0	0	0.00		0.00		0.00	
Albania												
Algeria	251	257	263	266	270	273	0.63	0.25	0.63	0.24	0.63	0.23
American Samoa	0	0	0	0	0	0	0.00		0.00		0.00	
Andorra	0	0	0	0	0	0	0.00		0.00		0.00	
Angola	115	94	69	60	58	56	−2.17	−2.07	−2.23	−2.91	−0.45	−0.77
Anguilla												
Antigua and Barbuda	0	0	0	0	0	0	0.00		0.00		0.00	
Argentina	769	1 080	1 193	1 290	1 301	1 380	31.10	3.45	14.00	1.19	9.00	0.68
Armenia	201	200	199	201	200	200	−0.13	−0.06	0.09	0.05	−0.07	−0.03
Aruba	0	0	0	0	0	0	0.00		0.00		0.00	
Ascension, Saint Helena and Tristan da Cunha	0	0	0	0	0	0	0.00		0.00		0.00	
Australia	1 023	1 485	2 316	2 283	2 087	2 057	46.18	3.80	53.24	2.91	−22.62	−1.04
Austria	1 478	1 440	1 371	1 352	1 332	1 313	−3.81	−0.26	−5.86	−0.42	−3.85	−0.29
Azerbaijan	293	306	289	323	304	308	1.32	0.44	1.16	0.37	−1.53	−0.48
Bahamas	0	0	0	0	0	0	0.00		0.00		0.00	
Bahrain	1	1	1	1	2	4	0.00	0.00	0.00	0.00	0.30	12.65
Bangladesh	90	75	72	158	244	330	−1.46	−1.76	5.53	5.08	17.23	7.65
Barbados	0	0	0	0	0	0	0.00		0.00		0.00	
Belarus	1 204	1 861	2 146	2 212	2 232	2 265	65.70	4.45	23.42	1.16	5.35	0.24
Belgium	446	408	406	438	427	427	−3.84	−0.90	2.02	0.48	−1.10	−0.25
Belize	1	1	1	1	1	1	0.00	0.00	0.00	0.00	0.00	0.00
Benin	87	54	39	42	42	42	−3.31	−4.70	−0.78	−1.62	0.05	0.13
Bermuda												
Bhutan	19	20	20	20	20	20	0.01	0.06	0.05	0.24	0.01	0.05
Bolivia (Plurinational State of)	20	35	50	57	95	116	1.51	5.77	1.46	3.29	5.93	7.40
Bonaire, Sint Eustatius and Saba	0	0	0	0	0	0	0.00		0.00		0.00	
Bosnia and Herzegovina				119	113	113					−0.67	−0.58
Botswana	0	0	0	0	0	0	0.00		0.00		0.00	
Brazil	3 558	3 652	7 328	9 938	9 626	9 214	9.41	0.26	419.05	6.90	−72.44	−0.75
British Virgin Islands	0	0	0	0	0	0	0.00		0.00		0.00	

(Continued)

TABLE A3 *(Continued)*

Country/areas	Planted forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Brunei Darussalam	1	1	4	5	6	6	0.06	6.93	0.25	9.47	0.07	1.31
Bulgaria	1 032	933	817	824	779	734	−9.90	−1.00	−7.27	−0.82	−9.00	−1.15
Burkina Faso	11	12	9	7	5	3	0.09	0.80	−0.30	−3.27	−0.36	−6.90
Burundi	161	113	113	113	113	113	−4.84	−3.50	0.00	0.00	0.00	0.00
Cabo Verde	20	24	29	31	34	37	0.44	2.03	0.46	1.70	0.62	1.83
Cambodia	67	100	155	544	561	596	3.26	4.03	29.62	11.96	5.22	0.92
Cameroon	18	21	41	51	121	121	0.30	1.55	2.00	6.07	7.00	9.01
Canada	4 621	9 396	14 141	16 265	18 442	20 708	477.45	7.35	457.97	3.73	444.22	2.44
Cayman Islands	0	0	0	0	0	0	0.00		0.00		0.00	
Central African Republic	2	2	2	2	4	4	0.00	0.00	0.00	0.00	0.20	7.10
Chad	11	14	17	18	20	21	0.30	2.48	0.30	1.90	0.27	1.39
Chile	1 528	2 230	2 932	3 148	3 166	3 154	70.24	3.86	61.20	2.33	0.64	0.02
China	44 152	54 831	73 324	79 010	88 048	92 603	1 067.90	2.19	1 611.93	2.47	1 359.30	1.60
Colombia	97	166	414	462	540	541	6.87	5.50	19.72	7.07	7.96	1.60
Comoros	2	2	1	1	1	2	0.00	0.00	−0.11	−7.41	0.10	8.76
Congo	59	59	59	59	59	134	0.00	0.00	0.00	0.00	7.50	8.54
Cook Islands	1	1	1	1	1	1	0.06	8.09	0.01	0.47	0.00	0.00
Costa Rica	16	105	99	64	60	45	8.89	20.53	−2.75	−3.27	−1.89	−3.45
Côte d'Ivoire	85	153	386	536	846	903	6.83	6.06	25.49	8.69	36.76	5.36
Croatia	92	82	75	75	75	74	−1.07	−1.23	−0.45	−0.57	−0.07	−0.10
Cuba	390	379	543	672	650	659	−1.08	−0.28	19.53	3.89	−1.26	−0.19
Curaçao	0	0	0	0	0	0	0.00		0.00		0.00	
Cyprus	24	28	31	31	33	33	0.32	1.25	0.24	0.82	0.17	0.54
Czechia	2 464	2 487	2 500	2 511	2 464	2 502	2.24	0.09	1.60	0.06	−0.89	−0.04
Democratic People's Republic of Korea	1 130	1 263	1 397	1 463	1 530	1 597	13.33	1.12	13.33	0.98	13.33	0.88
Democratic Republic of the Congo	107	96	93	102	119	131	−1.09	−1.07	0.41	0.41	2.87	2.50
Denmark			440	450	427	430					−2.00	−0.45
Djibouti	0	0	0	n.s.	n.s.	n.s.	0.00		n.s.		0.03	17.85
Dominica	0	0	0	0	0	0	0.00		0.00		0.00	
Dominican Republic	21	43	110	150	209	227	2.20	7.44	7.14	8.69	7.67	4.21
Ecuador	44	70	85	127	121	120	2.57	4.67	3.78	4.03	−0.68	−0.55
Egypt	3	3	3	3	3	3	0.00	0.00	0.00	0.00	n.s.	0.09
El Salvador	6	7	8	9	9	9	0.13	2.03	0.10	1.33	0.03	0.34
Equatorial Guinea	0	0	0	0	0	0	0.00		0.00		0.00	
Eritrea	10	10	10	10	10	10	0.00	0.00	0.00	0.00	0.00	0.00
Estonia	195	198	207	209	231	254	0.29	0.15	0.71	0.35	4.55	1.99
Eswatini	145	145	145	145	145	145	0.00	0.00	0.00	0.00	0.00	0.00
Ethiopia	240	429	619	694	866	969	18.93	5.99	17.67	3.26	27.42	3.38

(Continued)

TABLE A3 *(Continued)*

Country/areas	Planted forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Falkland Islands (Malvinas)*	0	0	0	0	0	0	0.00		0.00		0.00	
Faroe Islands	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.00	0.00	0.00	0.00
Fiji	85	125	166	187	207	227	4.07	4.00	4.07	2.68	4.09	2.00
Finland	4 390	5 145	6 908	7 368	7 836	7 836	75.42	1.60	148.24	2.42	46.79	0.62
France	1 528	1 586	2 073	2 232	2 294	2 356	5.80	0.37	43.07	2.30	12.40	0.54
French Guiana	1	1	1	1	1	1	0.00	0.00	0.00	0.00	0.01	1.34
French Polynesia	4	9	9	9	9	9	0.41	6.80	0.06	0.68	0.00	0.00
Gabon	38	45	57	58	48	48	0.70	1.70	0.83	1.64	−0.96	−1.81
Gambia	2	2	2	2	2	2	0.00	0.00	0.00	0.00	n.s.	−0.11
Georgia	47	47	47	47	47	47	0.00	0.00	0.00	0.00	0.00	0.00
Germany	5 650	5 677	5 705	5 717	5 729	5 741	2.70	0.05	2.65	0.05	2.40	0.04
Ghana	50	66	154	194	273	301	1.61	2.84	8.52	7.44	10.69	4.49
Gibraltar	0	0	0	0	0	0	0.00		0.00		0.00	
Greece	132	132	133	146	170	170	0.00	0.00	0.93	0.67	2.38	1.51
Greenland	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.00	0.00	0.00	0.00
Grenada	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.00	0.00	0.00	0.00
Guadeloupe	1	1	1	1	1	1	0.00	0.00	0.00	0.00	0.00	0.00
Guam	0	0	0	0	0	0	0.00		0.00		0.00	
Guatemala	24	37	112	132	180	308	1.30	4.42	6.32	8.84	17.64	8.87
Guernsey	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.01	6.14	0.01	2.07
Guinea	44	65	86	97	106	111	2.11	3.98	2.11	2.67	1.44	1.40
Guinea-Bissau	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.02	5.34	0.00	0.00	0.00	0.00
Guyana	0	0	0	0	0	0	0.00		0.00		0.00	
Haiti	0	0	0	0	0	0	0.00		0.00		0.00	
Holy See	0	0	0	0	0	0	0.00		0.00		0.00	
Honduras	0	0	2	15	26	36	0.00		1.03		2.04	8.79
Hungary			794	793	781	792					−0.11	−0.01
Iceland	7	21	37	42	45	49	1.39	11.11	1.36	4.58	0.78	1.74
India	10 663	11 289	11 711	11 945	13 264	13 472	62.54	0.57	43.72	0.38	152.70	1.21
Indonesia	3 168	3 322	4 460	4 668	5 450	5 485	15.42	0.48	89.74	2.29	81.61	1.62
Iran (Islamic Republic of)	1 559	1 559	1 559	1 559	1 559	1 559	0.00	0.00	0.00	0.00	0.00	0.00
Iraq	15	16	15	16	15	17	0.18	1.18	−0.04	−0.23	0.15	0.91
Ireland	380	549	640	658	681	716	16.87	3.74	7.26	1.21	5.77	0.84
Isle of Man	3	3	3	3	4	4	0.00	0.00	0.00	0.00	n.s.	0.12
Israel	66	88	88	89	85	100	2.20	2.92	0.07	0.08	1.10	1.17
Italy	529	596	634	613	631	623	6.68	1.20	1.15	0.19	1.04	0.17
Jamaica	9	8	8	8	8	8	−0.06	−0.68	0.01	0.10	0.01	0.10
Japan	102 87	10 331	10 292	10 218	10 120	10 077	4.40	0.04	−7.53	−0.07	−14.10	−0.14

(Continued)

TABLE A3 *(Continued)*

Country/areas	Planted forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Jersey												
Jordan	30	30	30	30	30	30	0.00	0.00	0.00	0.00	n.s.	0.01
Kazakhstan	517	529	444	421	422	431	1.18	0.23	−7.20	−1.51	1.01	0.24
Kenya	153	153	153	153	153	153	0.00	0.00	0.00	0.00	0.00	0.00
Kiribati												
Kuwait	3	5	5	6	6	6	0.15	3.76	0.07	1.34	0.02	0.34
Kyrgyzstan	159	165	185	197	86	86	0.62	0.38	2.10	1.17	−11.09	−7.95
Lao People's Democratic Republic	6	18	110	138	241	378	1.20	11.71	8.00	14.59	23.97	10.59
Latvia	314	322	329	420	542	564	0.77	0.24	6.52	1.78	14.37	2.99
Lebanon	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.29	0.00	0.00	0.00	0.00
Lesotho	9	9	9	9	9	9	0.00	0.00	0.00	0.00	0.00	0.00
Liberia	200	200	200	200	200	200	0.00	0.00	0.00	0.00	0.00	0.00
Libya	76	75	74	73	72	72	−0.12	−0.16	−0.12	−0.16	−0.12	−0.16
Liechtenstein	0	0	0	0	0	0	0.00		0.00		0.00	
Lithuania	411	466	536	585	586	590	5.52	1.27	7.92	1.52	0.45	0.08
Luxembourg	28	28	30	30	30	30	−0.01	−0.04	0.13	0.46	0.00	0.00
Madagascar	326	310	285	266	251	237	−1.58	−0.50	−2.97	−1.03	−2.91	−1.15
Malawi	139	118	97	86	76	59	−2.11	−1.63	−2.12	−2.07	−2.72	−3.72
Malaysia	1 935	1 628	1 309	1 708	2 069	2 359	−30.72	−1.71	5.37	0.32	65.09	3.28
Maldives	0	0	0	0	0	0	0.00		0.00		0.00	
Mali	4	11	234	413	491	527	0.66	9.65	26.78	27.34	11.46	2.48
Malta	0	0	0	0	n.s.	n.s.	0.00		0.00		0.01	
Marshall Islands	3	3	3	3	3	3	0.00	0.00	0.00	0.00	0.00	−0.16
Martinique	2	3	3	3	3	3	0.02	0.60	0.01	0.28	0.00	0.00
Mauritania	98	185	272	316	360	404	8.74	6.61	8.74	3.64	8.75	2.47
Mauritius	17	18	18	18	18	18	0.09	0.49	−0.01	−0.04	n.s.	−0.01
Mayotte	n.s.	n.s.	n.s.	1	1	1	0.01	5.24	0.01	3.60	0.02	3.79
Mexico	56	57	84	101	118	134	0.05	0.08	2.95	3.91	3.30	2.87
Micronesia (Federated States of)	20	17	14	14	14	14	−0.30	−1.60	−0.20	−1.28	0.00	0.00
Monaco	0	0	0	0	0	0	0.00		0.00		0.00	
Mongolia	1	1	1	1	8	8	n.s.	−0.07	n.s.	−0.05	0.65	18.74
Montenegro	8	8	8	8	8	8	0.00	0.00	0.00	0.00	0.00	0.00
Montserrat	0	0	0	0	0	0	0.00		0.00		0.00	
Morocco	478	539	546	549	574	587	6.10	1.21	0.66	0.12	3.77	0.67
Mozambique	38	38	55	66	74	84	0.00	0.00	1.87	3.75	1.83	2.47
Myanmar	394	696	989	1 144	1 299	1454	30.20	5.85	29.86	3.37	31.06	2.43
Namibia	0	0	0	0	0	0	0.00		0.00		0.00	
Nauru	0	0	0	0	0	0	0.00		0.00		0.00	

(Continued)

TABLE A3 *(Continued)*

Country/areas	Planted forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Nepal	370	370	370	370	370	370	0.00	0.00	n.s.	n.s.	−0.03	−0.01
Netherlands (Kingdom of the)	295	314	333	325	325	327	1.82	0.60	0.76	0.24	0.19	0.06
New Caledonia	9	10	11	5	5	5	0.08	0.85	−0.30	−4.04	0.00	0.00
New Zealand	1 531	2 025	2 024	2 025	2 123	2434	49.40	2.84	n.s.	n.s.	40.93	1.86
Nicaragua	0	0	26	64	98	132	0.00		4.30		6.74	7.42
Niger	48	73	98	110	123	198	2.50	4.32	2.50	2.82	8.75	6.03
Nigeria	1 612	1 911	2 210	2 359	2 508	2 658	29.88	1.71	29.88	1.41	29.88	1.20
Niue	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.00	0.00	0.00	0.00
Norfolk Island	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.00	0.00	0.00	0.00
North Macedonia												
Northern Mariana Islands	0	0	0	0	0	0	0.00		0.00		0.00	
Norway			116	113	113	113					−0.01	−0.01
Oman	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.00	0.00	0.00	0.00
Pakistan	104	106	109	110	118	127	0.25	0.24	0.28	0.26	1.65	1.40
Palau	19	20	20	20	21	21	0.07	0.37	0.05	0.23	0.05	0.22
Palestine	1	1	1	1	1	1	0.00	0.00	0.01	1.02	0.01	0.46
Panama	11	33	56	61	66	75	2.18	11.49	1.91	4.27	1.37	2.03
Papua New Guinea	49	49	49	49	54	59	n.s.	n.s.	n.s.	n.s.	0.96	1.80
Paraguay	0	0	0	0	52	322	0.00		0.00		32.17	
Peru	66	74	93	129	160	191	0.76	1.09	3.67	3.79	6.25	4.04
Philippines	291	321	351	366	539	712	3.00	0.99	3.00	0.88	34.66	6.90
Pitcairn												
Poland				7 348	7 382	7 406					5.85	0.08
Portugal	2 215	2 328	2 411	2 460	2 471	2 488	11.38	0.50	8.76	0.37	2.83	0.11
Puerto Rico	0	0	0	0	0	0	0.00		0.00		0.00	
Qatar	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.00	0.00	0.00	0.00	0.00	0.00
Republic of Korea	1 909	2 072	2 235	2 281	2 267	2 260	16.30	0.82	13.93	0.64	−2.10	−0.09
Republic of Moldova	146	155	212	219	211	210	0.86	0.57	4.25	2.32	−0.91	−0.42
Réunion	5	5	5	5	5	5	0.00	0.00	0.00	0.00	0.00	0.00
Romania	528	528	540	956	895	676	0.00	0.00	28.57	4.04	−28.01	−3.40
Russian Federation	17 019	18 305	20 243	20 449	20 623	20 797	128.68	0.73	142.88	0.74	34.88	0.17
Rwanda	232	248	277	317	357	397	1.59	0.66	4.59	1.64	8.02	2.28
Saint Barthélemy	0	0	0	0	0	0	0.00		0.00		0.00	
Saint Kitts and Nevis	0	0	0	0	0	0	0.00		0.00		0.00	
Saint Lucia	0	0	0	0	0	0	0.00		0.00		0.00	
Saint Martin (French part)	0	0	0	0	0	0	0.00		0.00		0.00	
Saint Pierre and Miquelon	0	0	0	0	0	n.s.	0.00		0.00		n.s.	

(Continued)

TABLE A3 *(Continued)*

Country/areas	Planted forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Saint Vincent and the Grenadines	n.s.	n.s.	n.s.	n.s.	1	1	0.04	26.20	0.00	0.00	0.01	2.00
Samoa	51	49	48	47	47	46	−0.13	−0.27	−0.13	−0.27	−0.13	−0.27
San Marino	0	0	0	0	0	0	0.00		0.00		0.00	
Sao Tome and Principe	0	0	0	0	0	0	0.00		0.00		0.00	
Saudi Arabia	68	68	68	68	68	76	0.00	0.00	0.00	0.00	0.75	1.05
Senegal	10	10	9	27	39	56	−0.05	−0.51	1.16	7.15	2.91	7.61
Serbia	39	162	187	199	212	224	12.35	15.34	2.47	1.38	2.47	1.17
Seychelles	5	5	5	5	5	5	0.00	0.00	0.00	0.00	n.s.	−0.04
Sierra Leone	7	8	15	18	21	25	0.12	1.63	0.67	5.67	0.67	3.24
Singapore	0	0	0	0	0	0	0.00		0.00		0.00	
Sint Maarten (Dutch part)	0	0	0	0	0	0	0.00		0.00		0.00	
Slovakia	739	755	741	747	772	776	1.63	0.22	−0.55	−0.07	2.94	0.39
Slovenia	65	65	65	66	64	70	0.00	0.00	0.07	0.10	0.38	0.56
Solomon Islands	25	25	25	25	25	26	0.01	0.04	0.01	0.03	0.06	0.22
Somalia	4	4	4	4	4	4	0.00	0.00	0.00	0.00	0.00	0.00
South Africa	1 915	2 060	2 206	2 278	2 351	2 423	14.51	0.73	14.51	0.67	14.51	0.62
South Sudan	716	716	716	716	716	716	0.00	0.00	0.00	0.00	0.00	0.00
Spain	1 945	2 391	2 596	2 620	2 803	2 819	44.62	2.09	15.21	0.61	19.96	0.74
Sri Lanka	271	237	204	185	236	236	−3.44	−1.35	−3.44	−1.63	5.12	2.47
Sudan	130	130	130	130	130	130	0.00	0.00	0.00	0.00	0.00	0.00
Suriname	14	14	14	14	14	14	0.00	0.00	0.00	0.00	0.00	0.00
Svalbard and Jan Mayen Islands	0	0	0	0	0	0	0.00		0.00		0.00	
Sweden	6 818	7 537	7 935	8 188	8 428	8 699	71.90	1.01	43.40	0.55	51.10	0.61
Switzerland	182	172	161	158	159	160	−1.06	−0.60	−0.94	−0.57	0.27	0.17
Syrian Arab Republic	218	228	279	294	295	295	0.98	0.44	4.43	1.72	0.04	0.01
Tajikistan	113	113	113	116	117	117	0.05	0.05	0.22	0.19	0.07	0.06
Thailand	3 702	3 702	3 702	3 702	3 961	3 314	0.00	0.00	0.00	0.00	−38.80	−1.10
Timor-Leste	12	12	12	12	12	12	0.00	0.00	0.00	0.00	0.00	0.00
Togo	21	34	47	54	61	96	1.33	5.10	1.33	3.13	4.17	5.89
Tokelau	0	0	0	0	0	0	0.00		0.00		0.00	
Tonga	1	1	1	1	1	1	0.00	0.00	0.00	0.00	0.00	0.00
Trinidad and Tobago	44	44	44	44	44	44	0.00	0.00	0.00	0.00	0.00	0.00
Tunisia	74	107	152	159	157	151	3.34	3.79	3.42	2.64	−0.79	−0.51
Türkiye	546	556	622	698	717	755	0.97	0.18	9.49	1.53	5.69	0.79
Turkmenistan	150	150	150	150	150	150	0.00	0.00	0.00	0.00	0.00	0.00
Turks and Caicos Islands	0	0	0	0	0	0	0.00		0.00		0.00	
Tuvalu	0	0	0	0	0	0	0.00		0.00		0.00	

(Continued)

TABLE A3 *(Continued)*

Country/areas	Planted forest (1 000 ha)						Net annual change					
	1990	2000	2010	2015	2020	2025	1990–2000		2000–2015		2015–2025	
							1 000 ha/yr	%	1 000 ha/yr	%	1 000 ha/yr	%
Uganda	170	268	367	416	465	514	9.84	4.67	9.84	2.96	9.84	2.15
Ukraine	4 567	4 695	4 817	4 872	4 848	4 848	12.80	0.28	11.80	0.25	−2.40	−0.05
United Arab Emirates	4	4	9	10	12	14	0.02	0.51	0.42	6.47	0.34	2.88
United Kingdom of Great Britain and Northern Ireland	2 434	2 610	2 715	2 811	2 871	2 934	17.60	0.70	13.40	0.50	12.30	0.43
United Republic of Tanzania	553	553	553	553	553	553	0.00	0.00	0.00	0.00	0.00	0.00
United States of America	17 938	22 560	25 564	26 364	27 462	27 423	462.20	2.32	253.60	1.04	105.90	0.39
United States Virgin Islands	0	0	0	0	0	0	0.00		0.00		0.00	
Uruguay	179	599	870	995	1 087	1 167	42.00	12.84	26.43	3.45	17.16	1.60
Uzbekistan	1 193	1 545	1 993	2 156	2 267	2 384	35.19	2.62	40.73	2.25	22.82	1.01
Vanuatu	20	19	19	19	18	18	−0.05	−0.24	−0.05	−0.25	−0.04	−0.24
Venezuela (Bolivarian Republic of)	370	728	930	1 014	1 056	1 110	35.81	7.01	19.07	2.24	9.65	0.91
Viet Nam	745	1 604	2 619	3 192	3 691	3 931	85.85	7.97	105.92	4.70	73.82	2.10
Wallis and Futuna Islands	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.02	5.07	0.00	0.00	−0.01	−1.29
Western Sahara	0	0	0	0	0	0	0.00		0.00		0.00	
Yemen	165	165	165	165	165	165	0.00	0.00	0.00	0.00	0.00	0.00
Zambia	57	56	56	55	54	54	−0.04	−0.08	−0.10	−0.17	−0.12	−0.21
Zimbabwe	389	365	340	333	327	321	−2.46	−0.65	−2.11	−0.60	−1.25	−0.38

Note: The rate of change (%) is calculated as the compound annual change rate. * A dispute exists between the Government of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas). n.s. corresponds to a non-significant value − that is, a value that is greater than zero but which would have been displayed as zero if rounded to the number of decimals in the column.

TABLE A4. Proportion of total planted forest area occupied by plantation forest and other planted forest, 1990–2025

Country/areas	Plantation forest (% of planted forest)						Other planted forest (% of planted forest)					
	1990	2000	2010	2015	2020	2025	1990	2000	2010	2015	2020	2025
Afghanistan												
Albania												
Algeria	0	0	0	0	0	0	100	100	100	100	100	100
American Samoa												
Andorra												
Angola	100	100	100	100	100	100	0	0	0	0	0	0
Anguilla												
Antigua and Barbuda												
Argentina	100	100	100	100	100	100	0	0	0	0	0	0
Armenia	25	25	25	25	25	25	75	75	75	75	75	75
Aruba												
Ascension, Saint Helena and Tristan da Cunha												
Australia	100	100	87	86	85	83	0	0	13	14	15	17
Austria	0	0	0	0	0	0	100	100	100	100	100	100
Azerbaijan	3	3	4	7	7	7	97	97	96	93	93	93
Bahamas												
Bahrain	0	0	0	0	0	0	100	100	100	100	100	100
Bangladesh	100	100	100	100	100	100	0	0	0	0	0	0
Barbados												
Belarus	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	100	100	100	100	100	100
Belgium	100	100	100	100	67	67	0	0	0	0	33	33
Belize	100	100	100	100	100	100	0	0	0	0	0	0
Benin	72	75	78	79	79	79	28	25	22	21	21	21
Bermuda												
Bhutan	100	100	100	100	100	100	0	0	0	0	0	0
Bolivia (Plurinational State of)	100	77	68	65	61	60	0	23	32	35	39	40
Bonaire, Sint Eustatius and Saba												
Bosnia and Herzegovina				0	0	0				100	100	100
Botswana												
Brazil	100	100	100	100	100	100	0	0	0	0	0	0
British Virgin Islands												
Brunei Darussalam	100	100	100	100	100	100	0	0	0	0	0	0
Bulgaria	0	0	0	0	0	0	100	100	100	100	100	100

(Continued)

TABLE A4 *(Continued)*

Country/areas	Plantation forest (% of planted forest)						Other planted forest (% of planted forest)					
	1990	2000	2010	2015	2020	2025	1990	2000	2010	2015	2020	2025
Burkina Faso	0	0	0	0	0	0	100	100	100	100	100	100
Burundi	100	100	100	100	100	100	0	0	0	0	0	0
Cabo Verde	0	0	0	0	0	0	100	100	100	100	100	100
Cambodia	100	100	100	100	100	100	0	0	0	0	0	0
Cameroon	100	100	100	100	50	50	0	0	0	0	50	50
Canada	0	0	0	0	0	0	100	100	100	100	100	100
Cayman Islands												
Central African Republic	100	100	100	100	100	100	0	0	0	0	0	0
Chad	0	0	0	0	0	0	100	100	100	100	100	100
Chile	100	100	100	100	100	100	0	0	0	0	0	0
China	79	77	75	74	73	73	21	23	25	26	27	27
Colombia	100	100	100	100	100	100	0	0	0	0	0	0
Comoros	100	100	100	100	60	43	0	0	0	0	40	57
Congo	100	100	100	100	100	96	0	0	0	0	0	4
Cook Islands	100	100	100	100	100	100	0	0	0	0	0	0
Costa Rica	100	100	100	100	100	100	0	0	0	0	0	0
Côte d'Ivoire	100	100	100	100	100	100	0	0	0	0	0	0
Croatia	100	100	100	100	100	100	0	0	0	0	0	0
Cuba	49	49	49	49	53	52	51	51	51	51	47	48
Curaçao												
Cyprus	0	0	0	0	0	0	100	100	100	100	100	100
Czechia	3	3	3	3	4	4	97	97	97	97	96	96
Democratic People's Republic of Korea	100	100	100	100	100	100	0	0	0	0	0	0
Democratic Republic of the Congo	37	26	17	15	13	12	63	74	83	85	87	88
Denmark			60	57	57	57			40	43	43	43
Djibouti				0	0	0				100	100	100
Dominica												
Dominican Republic	25	36	40	40	40	40	75	64	60	60	60	60
Ecuador	100	100	100	100	100	100	0	0	0	0	0	0
Egypt	0	0	0	0	0	0	100	100	100	100	100	100
El Salvador	100	100	100	100	100	100	0	0	0	0	0	0
Equatorial Guinea												
Eritrea	0	0	0	0	0	0	100	100	100	100	100	100
Estonia	3	3	3	3	3	2	97	97	97	97	97	98
Eswatini	100	100	100	100	100	100	0	0	0	0	0	0
Ethiopia	100	100	100	100	100	100	0	0	0	0	0	0
Falkland Islands (Malvinas)*												
Faroe Islands	100	100	100	100	100	100	0	0	0	0	0	0
Fiji	100	100	100	100	100	100	0	0	0	0	0	0

(Continued)

TABLE A4 *(Continued)*

Country/areas	Plantation forest (% of planted forest)						Other planted forest (% of planted forest)					
	1990	2000	2010	2015	2020	2025	1990	2000	2010	2015	2020	2025
Finland	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	100	100	100	100	100	100
France	0	0	0	0	0	0	100	100	100	100	100	100
French Guiana	0	0	0	0	0	0	100	100	100	100	100	100
French Polynesia	63	71	66	66	66	66	37	29	34	34	34	34
Gabon	100	100	100	100	100	100	0	0	0	0	0	0
Gambia	100	100	100	100	100	100	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	100	100	100	100	100	100
Germany	0	0	0	0	0	0	100	100	100	100	100	100
Ghana	100	100	100	100	100	100	0	0	0	0	0	0
Gibraltar												
Greece	100	100	100	100	100	100	0	0	0	0	0	0
Greenland	100	100	100	100	100	100	0	0	0	0	0	0
Grenada	100	100	100	100	100	100	0	0	0	0	0	0
Guadeloupe	0	0	0	0	0	0	100	100	100	100	100	100
Guam												
Guatemala	75	73	67	73	90	57	25	27	33	27	10	43
Guernsey	0	0	0	0	0	0	100	100	100	100	100	100
Guinea	100	100	100	100	100	100	0	0	0	0	0	0
Guinea-Bissau	100	100	100	100	100	100	0	0	0	0	0	0
Guyana												
Haiti												
Holy See												
Honduras			100	100	99	99			0	0	1	1
Hungary			19	18	16	15			81	82	84	85
Iceland	0	0	0	0	0	0	100	100	100	100	100	100
India	73	73	73	73	76	76	27	27	27	27	24	24
Indonesia	100	100	100	100	100	100	0	0	0	0	0	0
Iran (Islamic Republic of)	90	90	90	90	90	90	10	10	10	10	10	10
Iraq	0	0	0	0	0	0	100	100	100	100	100	100
Ireland	100	100	100	100	100	100	0	0	0	0	0	0
Isle of Man	82	82	82	82	81	81	18	18	18	18	19	19
Israel	0	0	0	0	0	0	100	100	100	100	100	100
Italy	25	21	20	20	20	20	75	79	80	80	80	80
Jamaica	100	100	100	100	100	100	0	0	0	0	0	0
Japan	0	0	0	0	0	0	100	100	100	100	100	100
Jersey												
Jordan	0	0	0	0	0	0	100	100	100	100	100	100
Kazakhstan	0	0	0	0	0	0	100	100	100	100	100	100
Kenya	98	98	98	98	98	98	2	2	2	2	2	2
Kiribati												
Kuwait	0	0	0	0	0	0	100	100	100	100	100	100

(Continued)

TABLE A4 *(Continued)*

Country/areas	Plantation forest (% of planted forest)						Other planted forest (% of planted forest)					
	1990	2000	2010	2015	2020	2025	1990	2000	2010	2015	2020	2025
Kyrgyzstan	0	0	0	0	0	0	100	100	100	100	100	100
Lao People's Democratic Republic	100	100	100	100	100	100	0	0	0	0	0	0
Latvia	0	0	2	5	7	7	100	100	98	95	93	93
Lebanon	0	0	0	0	0	0	100	100	100	100	100	100
Lesotho	61	61	61	61	61	61	39	39	39	39	39	39
Liberia	100	100	100	100	100	100	0	0	0	0	0	0
Libya	86	86	86	86	86	86	14	14	14	14	14	14
Liechtenstein												
Lithuania	0	0	0	0	0	0	100	100	100	100	100	100
Luxembourg	0	0	0	0	0	0	100	100	100	100	100	100
Madagascar	100	100	100	100	100	100	0	0	0	0	0	0
Malawi	100	100	100	100	100	100	0	0	0	0	0	0
Malaysia	5	12	22	37	45	52	95	88	78	63	55	48
Maldives												
Mali	0	0	0	0	0	0	100	100	100	100	100	100
Malta					100	100					0	0
Marshall Islands	0	0	0	0	0	0	100	100	100	100	100	100
Martinique	0	0	0	0	0	0	100	100	100	100	100	100
Mauritania	0	0	0	0	0	0	100	100	100	100	100	100
Mauritius	100	100	100	100	100	100	0	0	0	0	0	0
Mayotte	0	0	0	0	0	0	100	100	100	100	100	100
Mexico	100	92	93	95	95	96	0	8	7	5	5	4
Micronesia (Federated States of)	100	100	100	100	100	100	0	0	0	0	0	0
Monaco												
Mongolia	0	0	0	0	0	0	100	100	100	100	100	100
Montenegro	100	100	100	100	100	100	0	0	0	0	0	0
Montserrat												
Morocco	75	75	75	75	75	75	25	25	25	25	25	25
Mozambique	100	100	100	100	100	100	0	0	0	0	0	0
Myanmar	100	100	100	100	100	100	0	0	0	0	0	0
Namibia												
Nauru												
Nepal	100	100	100	100	100	100	0	0	0	0	0	0
Netherlands (Kingdom of the)	10	1	1	1	1	1	90	99	99	99	99	99
New Caledonia	100	100	94	100	100	100	0	0	6	0	0	0
New Zealand	100	100	100	100	100	100	0	0	0	0	0	0
Nicaragua			100	100	100	100			0	0	0	0
Niger	100	100	100	100	100	100	0	0	0	0	0	0
Nigeria	100	100	100	100	100	100	0	0	0	0	0	0

(Continued)

TABLE A4 *(Continued)*

Country/areas	Plantation forest (% of planted forest)						Other planted forest (% of planted forest)					
	1990	2000	2010	2015	2020	2025	1990	2000	2010	2015	2020	2025
Niue	100	100	100	100	100	100	0	0	0	0	0	0
Norfolk Island	100	100	100	100	100	100	0	0	0	0	0	0
North Macedonia												
Northern Mariana Islands												
Norway			100	100	100	100			0	0	0	0
Oman	0	0	0	0	0	0	100	100	100	100	100	100
Pakistan	100	100	100	100	100	100	0	0	0	0	0	0
Palau	80	80	80	80	80	80	20	20	20	20	20	20
Palestine	0	0	0	0	0	0	100	100	100	100	100	100
Panama	100	100	100	100	100	100	0	0	0	0	0	0
Papua New Guinea	100	100	100	100	100	100	0	0	0	0	0	0
Paraguay					100	100					0	0
Peru	100	100	100	100	100	100	0	0	0	0	0	0
Philippines	100	100	100	100	100	100	0	0	0	0	0	0
Pitcairn												
Poland				n.s.	n.s.	n.s.				100	100	100
Portugal	28	30	31	32	32	31	72	70	69	68	68	69
Puerto Rico												
Qatar	0	0	0	0	0	0	100	100	100	100	100	100
Republic of Korea	100	100	100	100	100	100	0	0	0	0	0	0
Republic of Moldova	0	0	0	0	0	0	100	100	100	100	100	100
Réunion	0	0	0	0	0	0	100	100	100	100	100	100
Romania	0	0	0	0	0	0	100	100	100	100	100	100
Russian Federation	0	0	0	0	0	0	100	100	100	100	100	100
Rwanda	100	100	100	100	100	100	0	0	0	0	0	0
Saint Barthélemy												
Saint Kitts and Nevis												
Saint Lucia												
Saint Martin (French part)												
Saint Pierre and Miquelon						0						100
Saint Vincent and the Grenadines	25	2	5	2	0	0	75	98	95	98	100	100
Samoa	62	62	62	62	62	62	38	38	38	38	38	38
San Marino												
Sao Tome and Principe												
Saudi Arabia	0	0	0	0	0	0	100	100	100	100	100	100
Senegal	10	15	21	38	37	40	90	85	79	62	63	60
Serbia	0	13	14	14	14	15	100	87	86	86	86	85
Seychelles	100	100	100	100	100	100	0	0	0	0	0	0

(Continued)

TABLE A4 *(Continued)*

Country/areas	Plantation forest (% of planted forest)						Other planted forest (% of planted forest)					
	1990	2000	2010	2015	2020	2025	1990	2000	2010	2015	2020	2025
Sierra Leone	100	100	100	100	100	100	0	0	0	0	0	0
Singapore												
Sint Maarten (Dutch part)												
Slovakia	0	n.s.	1	1	1	1	100	100	99	99	99	99
Slovenia	48	48	48	48	49	45	52	52	52	52	51	55
Solomon Islands	93	96	98	99	100	100	7	4	2	1	0	0
Somalia	0	0	0	0	0	0	100	100	100	100	100	100
South Africa	100	93	86	83	80	78	0	7	14	17	20	22
South Sudan	100	100	100	100	100	100	0	0	0	0	0	0
Spain	39	39	39	39	37	37	61	61	61	61	63	63
Sri Lanka	100	100	100	100	100	100	0	0	0	0	0	0
Sudan	100	100	100	100	100	100	0	0	0	0	0	0
Suriname	0	0	0	0	0	0	100	100	100	100	100	100
Svalbard and Jan Mayen Islands												
Sweden	9	8	9	5	3	3	91	92	91	95	97	97
Switzerland	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	100	100	100	100	100	100
Syrian Arab Republic	0	0	0	0	0	0	100	100	100	100	100	100
Tajikistan	69	69	69	69	69	69	31	31	31	31	31	31
Thailand	100	100	100	100	100	100	0	0	0	0	0	0
Timor-Leste	100	100	100	100	100	100	0	0	0	0	0	0
Togo	80	80	80	80	80	82	20	20	20	20	20	18
Tokelau												
Tonga	100	100	100	100	100	100	0	0	0	0	0	0
Trinidad and Tobago	37	37	37	37	37	37	63	63	63	63	63	63
Tunisia	41	41	41	41	41	41	59	59	59	59	59	59
Türkiye	100	100	100	100	100	100	0	0	0	0	0	0
Turkmenistan	100	100	100	100	100	100	0	0	0	0	0	0
Turks and Caicos Islands												
Tuvalu												
Uganda	100	100	100	100	100	100	0	0	0	0	0	0
Ukraine	7	7	7	8	8	8	93	93	93	92	92	92
United Arab Emirates	0	0	0	0	0	0	100	100	100	100	100	100
United Kingdom of Great Britain and Northern Ireland	0	0	0	0	0	0	100	100	100	100	100	100
United Republic of Tanzania	100	100	100	100	100	100	0	0	0	0	0	0
United States of America	34	39	49	50	52	52	66	61	51	50	48	48
United States Virgin Islands												

(Continued)

TABLE A4 *(Continued)*

Country/areas	Plantation forest (% of planted forest)						Other planted forest (% of planted forest)					
	1990	2000	2010	2015	2020	2025	1990	2000	2010	2015	2020	2025
Uruguay	100	100	100	100	100	100	0	0	0	0	0	0
Uzbekistan	52	63	73	74	64	65	48	37	27	26	36	35
Vanuatu	100	100	100	100	100	100	0	0	0	0	0	0
Venezuela (Bolivarian Republic of)	100	100	100	100	100	100	0	0	0	0	0	0
Viet Nam	100	100	100	100	100	100	0	0	0	0	0	0
Wallis and Futuna Islands	32	5	0	0	0	0	68	95	100	100	100	100
Western Sahara												
Yemen	0	0	0	0	0	0	100	100	100	100	100	100
Zambia	92	92	92	92	92	92	8	8	8	8	8	8
Zimbabwe	100	100	100	100	100	100	0	0	0	0	0	0

Note: * A dispute exists between the Government of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands. (Malvinas). n.s. corresponds to a non-significant value – that is, a value that is greater than zero but which would have been displayed as zero if rounded to the number of decimals in the column.

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A comprehensive assessment of the world's forests and how they are changing.

Forests are at the core of the 2030 Agenda for Sustainable Development. Understanding their status and how they change over time, therefore, is essential for designing and implementing sustainable policies, monitoring their impacts, and ensuring the long-term provision of forest goods and services.

Drawing on national reports prepared for FAO, the **Global Forest Resources Assessment 2025** provides a detailed analysis of forest extent and change; characteristics; biomass and carbon; policies and legislation; designation and management; ownership and management rights; disturbances; non-wood forest products; and more. It finds that, although the rate of deforestation is slowing, forests are still being lost at nearly 11 million hectares per year. The area of planted forests continues to expand, but at a slower rate than before. Legally protected forests now cover one-fifth of the total forest area, and more than half the world's forests are under formal management plans.

This report is an essential resource for understanding long-term trends in forest resources and how they relate to global goals and targets, including those on biodiversity, climate and sustainable land use. With its transparent methodology and broad scope, the Global Forest Resources Assessment 2025 is the only worldwide assessment based on official national data. It is, therefore, the most authoritative global source of data for policymakers, foresters, researchers and anyone else wanting to know the past, present and future of the world's forests.

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Ministry for Foreign Affairs of Finland

NICFI Norway's International Climate and Forest Initiative

gef global environment facility INVESTING IN OUR PLANET

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